

MANUFACTURE

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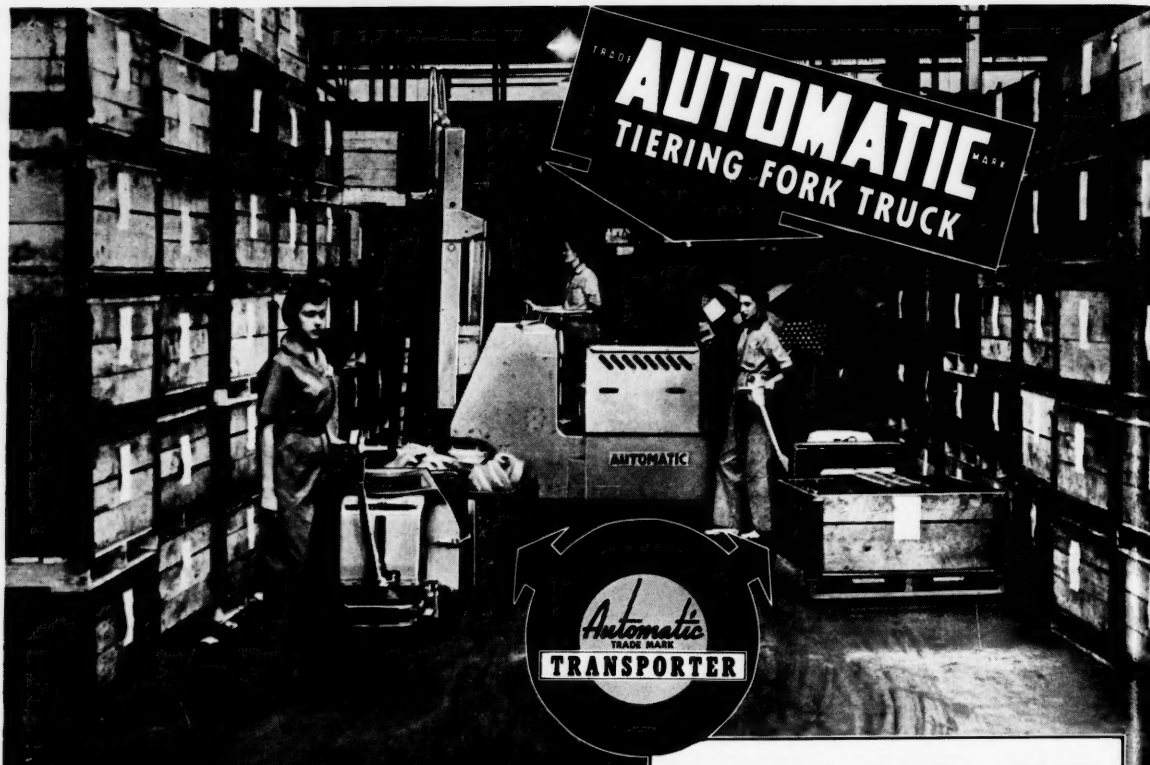
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## PICKETING

# STACKS

There is no such thing as peaceful picketing. Picketing, to be effective, must be backed by the threat of violence. This can be called by no other name than coercion of all the people by the physical force of a few of their number striving to advance their own selfish interests at the expense of their fellows and their country. If the threat is followed by force, then picketing becomes rebellion against the laws of the land.





*The Right Combination*  
**TO ESTABLISH DAY AFTER DAY  
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**NO STRAINING • TUGGING • PULLING  
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**T**HE TRANSPORTER for horizontal movement of many more tons of material per load than by conventional methods, from receiving, to process, to storage, to shipping . . . and the AUTOMATIC Tiering Fork Truck for stacking of pallet loads, give you a modern handling system to make possible numerous daily and valuable benefits.

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each job speedily to effect valuable time savings—you inject cost savings all along the production line—you get dependable insurance against breakage—you add safety to production—you conserve much needed floor space through high, orderly stacks which are always easily available.

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DIV. OF THE YALE & TOWNE MFG. CO.

CHICAGO 20, ILLINOIS

# MANUFACTURERS RECORD

ESTABLISHED 1882

*A Publication for Executives*

Volume 113

MARCH, 1944

Number 3

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## IN THE MAIL

"I wish to congratulate you on the splendid editorial entitled 'By Their Fruits Ye Shall Know Them,' a copy of which was enclosed with your letter. It is one of the strongest indictments of the 'new deal' that I have read. I think every word of it is true however. The question is whether our people in sufficient numbers will awaken to the danger threatening Constitutional government before it is too late."

L. E. Faulkner, Vice Pres. and  
General Manager of  
Mississippi Central Railroad Co.  
Hattiesburg, Miss.

I certainly get a great deal of information and inspiration from my MANUFACTURERS RECORD each month.

Walter T. Candler.  
1702 Candler Building  
Atlanta, Ga.

You are doing a fine piece of work and one which is much needed.

Chas. J. Williams, President.  
MOORE PIPE & SPRINKLER CO.  
Jacksonville, Florida

We think you have "hit the nail right on the head" in all of these editorials. We think they are the very things that should be said to the American public at this time.

John L. Avery, General Sales Manager.  
FROST LUMBER INDUSTRIES, INC.  
Shreveport, La.

The MANUFACTURERS RECORD will help get America back on the right track because it doesn't use six-cylinder words. America has been mystified.

George A. Boissard, President  
NATIONAL GUARDIAN LIFE  
INSURANCE COMPANY  
Madison, Wisconsin.

Surely enjoyed reading your articles on North Carolina. Would like to see more of these issues devoted to our Southern states. Let us have one on Tennessee sometime.

Sam B. Goodsey.  
P. L. HARRIS, INC.  
Knoxville, Tenn.

I want to express my great appreciation for the educational work you are doing in keeping the American people advised of the immediate danger to the American system of free enterprise and liberty.

W. A. Carter.  
CARTER MANUFACTURING  
COMPANY  
Memphis, Tennessee.

# "DIXIE" is now a land of Steel



ALMOST OVERNIGHT the "land of cotton" has also become a land of steel. Large manufacturing plants have mushroomed all over the South, bringing the diversification that leads to a sound prosperity.

Shipbuilding is flourishing all along the coast from Chesapeake Bay to Texas. Mobile Bay is teeming with all kinds of vessels, from landing barges to Victory ships.

The South is rapidly becoming an aviation center. Some of the nation's largest aviation plants have sprung up there. Huge bomber and airplane modification plants take the standard planes and fit them with the most modern armament. Air traffic between the Americas has already made Miami a top port of entry for air visitors.

Large chemical plants have turned to the South because of natural re-

sources and favorable conditions. The biggest high octane gasoline area in the nation is located in Texas.

Southern farmers have diversified their operations, raising more cattle, sweet potatoes, peanuts and other food and feed crops.

All of these developments need large quantities of steel—much of which is being supplied by Tennessee Coal, Iron & Railroad Company. To meet growing war demands, TCI's capacity has been greatly expanded. When peace comes, this steel capacity will be used for fencing, roofing, housing, construction, manufacturing and in a hundred other ways to increase Southern prosperity.

## NEW STEEL FILM AVAILABLE

The new United States Steel film on war production "To Each Other" is now being shown in theaters

throughout the country. It is available for showing to your employees, club members, and other private groups. Write for further information.

## **U-S-S Steel Products manufactured in our mills include:**

- Rolled, forged and drawn steel products.
- Structural shapes, plates, bars, small shapes, agricultural shapes, tool steel, strip, hoops, cotton ties.
- Black, galvanized and special finish sheets.
- Wire and wire products.
- Reinforcing bars.
- Rails, track accessories, axles and forgings.
- Culverts, Panelbilt prefabricated steel buildings, cold-formed steel sections.
- U-S-S High Tensile Steels and U-S-S Abrasion-Resisting Steels.
- Semi-finished products, pig iron and ferro-manganese.

Steel needs more scrap NOW—send it in!



**TENNESSEE COAL, IRON & RAILROAD COMPANY**

*Birmingham, Alabama*

United States Steel Export Company, New York

Awarded to manufacturing divisions of  
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**UNITED STATES STEEL**





## *Complete* **INSULATION SERVICE**

*From Blueprint to Building*

*One of Birmingham's finest buildings is the 15-story Jefferson Hospital. Insulation for cold storage rooms, refrigeration lines and ducts designed, manufactured and installed by Badham.*

In modern building, insulation begins with the blueprints, and Badham engineers plan their installations as a vital part of each construction project. Today, Badham insulation is on the job in many parts of the globe . . . in hospitals, warships, transports, supply vessels, food storage plants, industrial buildings and homes.

Your own profits, now and after the war, will be increased by the fuel economy and production efficiency that go hand-in-hand with expert insulation. Badham service is competent and complete, covering every phase of insulation research, engineering,

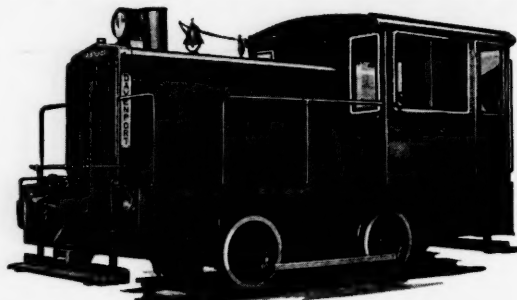
manufacture and installation. We invite the opportunity to consult on your building, modernization and re-conversion plans.

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INSULATION  
COMPANY**

**BIRMINGHAM, ALABAMA**

MANUFACTURERS OF **BADHAM** PIPE COVERINGS

## GUTS for WAR means LONGER LIFE IN PEACE



We have been building Davenport Better-Built Davenport Locomotives for war service in many vital areas where long, hard, gruelling haulage is the normal order of the day. Stamina-Built Davenports have proven themselves worthy under the exacting tests of war—your assurance of low cost, dependable haulage, when peace comes, and you find it necessary to meet the responsibilities of profitable operation in a highly competitive post-war economy.



Better-Built  
**DAVENPORTS**  
are AVAILABLE in  
**STEAM**  
**GASOLINE**  
**DIESEL**  
with  
**ELECTRIC**  
or  
**MECHANICAL**  
**DRIVE**

Davenports are efficient, easy-to-handle, responsive to controls, and possessed of ruggedness and power that spells extra years of superb performance.

We cannot, now, accept private orders without special permission from Uncle Sam. However, we can assist you to plan your haulage equipment requirements so that, when the time comes for post-war action, it will be possible to give you the prompt delivery you will require.

### FREE HAULAGE ANALYSIS

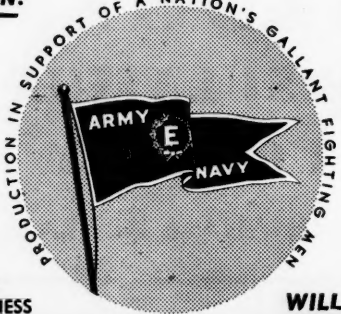
Our engineers will gladly assist you in determining the size and type of locomotives best suited to your particular needs. We invite you to submit descriptions of your haulage conditions and will place reliable recommendations in your hands without the slightest obligation.

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TO  
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MAKE  
EVERY  
DAY  
COUNT  
TOWARD  
VICTORY

**WILL YOU?**

**DAVENPORT LOCOMOTIVE WORKS**

A DIVISION OF DAVENPORT BESLER CORPORATION, DAVENPORT IOWA

## Little Grains of Sand

*"Little drops of water, little grains of sand,  
Make the mighty ocean, and the pleasant land."*

No matter what the political beliefs of our forefathers may have been, history has recorded Daniel Webster as a great man. Here is one of his "Grains of Sand" that has long outlived his mortal body:

"I WAS BORN AN AMERICAN; I live an American; I shall die an American; and I intend to perform the duties incumbent upon me in that character to the end of my career. I mean to do this with absolute disregard of personal consequences. What are the personal consequences? What is the individual man, with all the good or evil that may betide him in comparison with the good or evil which may befall a great country, and in the midst of great transactions which concern that country's fate? Let the consequences be what they will, I am careless. No man can suffer too much, and no man can fall too soon, if he suffer, or if he fall, in the defense of the liberties and constitution of his country."

At a press conference, the First Lady of the Land said that she would welcome a peacetime national service act, but added that according to her own idea, it should include girls as well as boys. She expressed the opinion that both boys and girls should give a year to their country in preparation for "better citizenship." The boys would have just enough military training to acquaint them with life.

Here is the First Lady of the land espousing, publicly, one of the most insidious of the Mussolini-Hitler systems of getting control of the mind of youth. It was the Fascist and Nazi youth organizations which enabled the two dictators to build their power, and to gain a hold on their subjects that will take the armed might of the United Nations to break. So firm is the grip they gained through "national service" by their youth that it will take the great force of the armies and navies of the truly civilized countries to break its hold, and it will take a program of education extending over several generations to destroy the doctrines the dictators inculcated.

Service is something that the State should render its people if Democracy is to be retained. If the people are to serve the state, the boys and girls are taught that they are at the beck and call of their government supervisors, that they are the servants of the state. Under this conception of state supremacy the Constitution is relegated to the position of a scrap of paper. A subservient generation has acknowledged the loss of its independence and liberty has become a word, the meaning of which can only be discovered in the dictionaries of free countries and in the history of our own.

A letter recently received contained the alliterative phrase "Wishful Wasters in Washington." This could be amended to read "Willful Wasters in Washington."

The radicals and others who would disturb the harmonious relations between whites and blacks in the South, frequently harp on the theme, "The South does not attempt to educate the black man." If it is meant thereby the South does not expend as much per capita on Negro education as on learning for the whites, there is truth in their statements.

There are very good reasons why the South does not expend as much on the black man's education as it does on that of the white race. Chief among them is that the Negro race, as a whole, is not yet ready for the education the white man is able to assimilate. In addition the vast majority of Negroes in the South look upon education as an irksome chore to be cast aside as soon as State laws regulating compulsory schooling have been complied with.

However, from a financial viewpoint the Negro in the South is getting more than his educational dollar's worth for his tax dollar. Georgia, which for a southern state has an average colored population, collects 96.9 per cent of its property and poll taxes from whites, 3.1 per cent from Negroes, but expends more than 15 per cent of its educational funds on the Negro.

There is an old saying that used to be applied to men who couldn't fit themselves into a suitable job: "too heavy for light work and too light for heavy work."

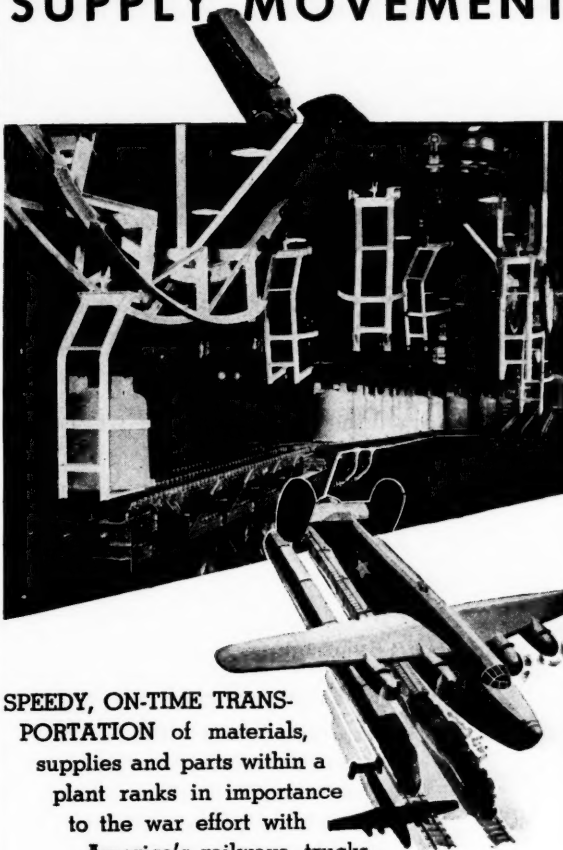
The first part of this quotation will apply to the young men who have left the employ of private companies to answer the call of their country, when they return to civilian life.

Scores of these young men have left the MANUFACTURERS RECORD and its associated company, Fleet-McGinley, Inc., and have kept us advised as to their military or naval progress. Many are non-commissioned officers, and there are lieutenants, captains and majors among them. These fellows are not going to be satisfied to come back to an ordinary clerical job or to feeding a press. They will have learned too much about their own characters and their own possibilities to be willing to merely earn a living. They must be assimilated into our companies and they must be assimilated into yours in positions that give them an opportunity to demonstrate the manhood, self-confidence, knowledge of discipline and courageous outlook on life that they have learned.

It is the duty of every executive who controls, either directly or indirectly, the employment of associates in his business (and each man, no matter what his job may be, is his associate) to realize that it is his privilege to reemploy every man who has left him to join one of the armed services and to reevaluate each such man at his worth when he walks into the office and says, "I want a job."

# Common Carriers

## VITAL TO WAR SUPPLY MOVEMENT

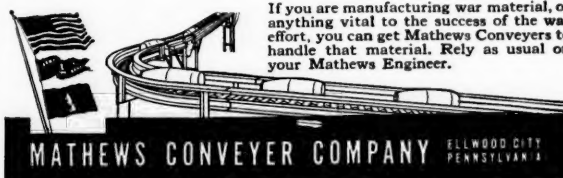


**SPEEDY, ON-TIME TRANSPORTATION** of materials, supplies and parts within a plant ranks in importance to the war effort with

America's railways, trucks, ships and cargo planes.

A well-engineered Conveyor System, geared to the speed of workers and machines, is a practical method of improving production from the receiving of raw materials right through to the shipping area.

### MATHEWS CONVEYERS FOR MECHANIZED PRODUCTION



If you are manufacturing war material, or anything vital to the success of the war effort, you can get Mathews Conveyers to handle that material. Rely as usual on your Mathews Engineer.

**MATHEWS CONVEYER COMPANY**

ELLWOOD CITY  
PENNSYLVANIA

# MANUFACTURERS-

## *Consider the Seaboard Southeast!*

The tempo at which the nation's industrial machinery is being operated to produce our enormous war needs is making demands of it far above normal. Replacements will be necessary in many industries when peace dawns.

To all manufacturers, particularly those who must replace their equipment, the Seaboard extends an invitation to establish their plants in the Southeast. This area possesses those attributes making for successful operation now and insuring a strong peacetime competitive position.

The Seaboard's Industrial Department is maintained to assist manufacturers in their plant location problems. Your inquiry will receive prompt confidential attention and at no cost or obligation.

### *Address*

**DALLAS T. DAILY**

*General Industrial Agent*

**SEABOARD  
AIR LINE RAILWAY**

**NORFOLK, VIRGINIA**

The Tennessee Coal, Iron and Railroad Company says on another page in this issue, "almost overnight the 'land of cotton' has also become a land of steel. \* \* \* Shipbuilding is flourishing from the Chesapeake Bay to Texas. \* \* \* The South is rapidly becoming an aviation center; large chemical plants have turned to the South because of natural resources; Southern farmers have diversified their operations, raising more cattle, more food and feed crops than ever."

Facts such as these, which have been emphasized frequently in the columns of the MANUFACTURERS RECORD, point unerringly to continuous and greater progress in the South, and the importance of this development as a contributing factor to America's future wealth.

The South's advantages for private enterprise are more widely known and accepted by investors and industrialists of the country than ever before.

Will L. Clayton is heading the important Surplus War Property Administration. That may make him a bureaucrat. But anyone who has had opportunity to analyze the reasons why Mr. Clayton is one of the big men the South has furnished the nation understands that the simplicity with which he takes apart and deals with great matters is the distinguishing mark of his ability. He doesn't think the way bureaucrats are supposed to do. There can be no question in the minds of the many who know him but that the important commission he heads will be in the hands of a man of ability and unquestioned integrity.

The president of a leading oil company recently said: "It is important to remember that the oil industry, like all American business, has been able to accomplish the extraordinary war job, because, in time of peace, the companies were competing with each other to make better products by better methods. Spurred on by this competition, the skill of the American worker and the ability of American business management combine to make this country the industrial leader of the world. What this means to us today, in war, is dramatically demonstrated by the fact that three years ago the United States was the weakest in armament among the great nations and now has become the strongest in armament. With this kind of support, our military forces and those of our allies are now moving steadily toward victory."

It is reported that there are no restrictions on gasoline consumption by civilians in Egypt. It is also reported that automobiles, almost impossible to buy in America, have created a serious traffic problem in Cairo.

MANUFACTURERS RECORD FOR

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Men and women who have sons in Italy, New Guinea, China and elsewhere all over the globe, are now asking themselves whether they shall vote in the next election as they are instructed to vote so that their instructors may continue from one election to the next to continue to instruct, or whether they should vote according to the dictates of their own consciences with the knowledge that their boys are looking into their minds and hearts, and expect to find an America of freedom and opportunity when they come home.

One of the men of clear vision in public life today is Representative Summers of Texas. He recently wrote the following and the MANUFACTURERS RECORD recommends it for your consideration:

More and more in later years we have been engaged in the perfectly silly undertaking of trying to make this Federal organization function as the general governmental agency of all the people. As a result, we have built up at Washington a governmental Colossus utterly beyond human comprehension or democratic control, regardless of which party or group of officials is in power. By the nature of that sort of government, it is inevitable there shall be extravagance, wastefulness, tyranny.

It is inevitable that there shall be more and more government by directives issued by appointed, not elected, personnel working without supervision. We have all but reduced the States to the status of governmental vassals . . .

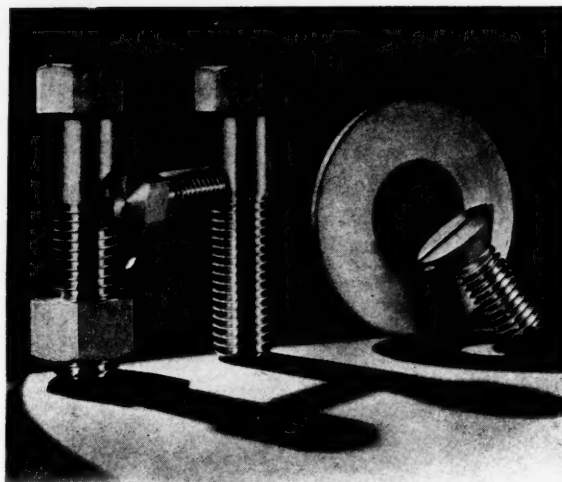
The general executive board of the United Brotherhood of Carpenters and Joiners has charged the new deal with "leading the nation toward overall paternalism."

"Such paternalism is a stealthy threat to the continued freedom of organized labor," said the statement, introduced by International President William L. Hutcheson, of this AFL union, who added that "the new deal is playing a dangerous game of politics in the internal organizational life of the unions."

It must soon become obvious even to the rank and file of organized labor that government paternalism will result eventually in the loss of their freedom.

The workers in France, through their unions, were fighting for a 35-hour week. (Before the Maginot Line was cracked.) These same workers are now slaves of a puppet government and often work as much as an 80 hour week at such jobs and in such places as their masters command.

F. D. R.—Federal Debt Raiser—or the initials of our President? Which do they stand for in your mind? Or do they stand for both?



*Non-ferrous and  
Stainless FASTENING*

## Headquarters

HEADQUARTERS is "a chief place of business." So . . . when you need non-ferrous and stainless fastenings, come to Harpers . . . the organization which specializes on the manufacture of bolts, nuts, screws, washers, rivets and specials made of Brass, Bronze, Copper, Everdur, Monel and Stainless . . . an organization not concerned with common steel fastenings.

To serve fastening users, Harper stocks over 4280 different items . . . employs a large staff of engineers and field service men . . . and offers a vast fund of practical non-ferrous and stainless fastening "Know how." Sample this "Know how" by writing (on your letterhead) for a four-color, 84 page catalog.

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## "Pursley Doesn't Seem to Grasp This Paper-Saving Idea"

Pursley's "doodling" may not seem very important in itself—but this widespread bad habit is today wasting many a ton of good white paper.

It's worth-while to check up on such practices now that paper is a vital material of war . . . with 25 tons of blueprint paper required to make a battleship and 12 pounds of paper for every 500-pound bomb.



USE LESS—SO OUR FIGHTING FORCES WILL HAVE MORE

12

Here are ways in which form users can save paper:

1. Design forms to use fewer parts of smaller size
2. Reduce weight of paper stock
3. Correct minor errors—don't use a new form
4. Don't buy in too large quantities

—and don't forget whenever you use paper:

Don't throw away slightly damaged or soiled stationery

Use both sides of the sheet

Design printed matter to use less paper

Prune the "deadheads" out of mailing lists

Remember, paper saving is in the national interest—and it's a job in which YOUR co-operation is needed. Let's all starve our wastebaskets and make each piece of paper stretch farther.

UNITED AUTOGRAPHIC REGISTER COMPANY  
Chicago, Cleveland, Oakland • Offices in All Principal Cities

MANUFACTURERS RECORD FORM

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*"What Enriches the South Enriches the Nation"*

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## THE NEEDY AND THE GREEDY

*The Macon Telegraph* deserves the applause of the entire Nation for its recent editorial titled "Day of Reckoning Has Come." It has the courage of its convictions and has expressed itself in a manner that every man in the street recognizes as "calling a spade a spade."

"A wave of indignation has swept over the country by reason of President Roosevelt's veto of the 2.1 billion dollar tax bill—the first revenue measure ever vetoed in the history of this country—and particularly in resentment of the insulting language used towards Congress in transmitting his message.

"The very idea of a man who never earned an honest dollar in his life, whose personal fortune was placed in trust by his father, who recognized that the son was not capable of managing his own affairs, who never balanced a budget in all the years that he rattled around as governor of New York and President of the United States—this idea of such a man lecturing the trained minds of the House and Senate who evolved this bill is enough to make 'the urchin point and laugh with all his soul.'

"The veto message was not only insulting, it was stupid. In his favorite role as a phrase monger—mouthing some of the catch words framed by his ghost writers—he says the bill was drawn, 'not for the needy but for the greedy.'"

It should be interesting to all of us to speculate on the last part of the above paragraph. Who are the greedy?

Are they the bankers, the insurance and investment companies that have bought Government bonds with their depositors' money at the Government's request?

Are they the railroads which have performed miracles under private ownership, even though crippled by Government dictatorship?

Are they the coal operators who have yielded to organized labor and Government pressure in order to fulfill their part as patriotic citizens?

Are they large industrialists who not only donate a great part of their time to consultations with the Government, but are compelled to give a great deal more of their time attempting to teach the pusillanimous puppets in Washington that business is a question of production and not theory?

Are they the smaller business men, so-called, who have seen their companies shrink and, in many cases, disappear because of rulings prohibiting them either from adequate supplies or adequate labor to continue functioning?

Are they the salaried men who are doing the work of two or three men today and receiving the same salary they were paid in 1939?

Are they the professional men, the doctors, who take care of their colleagues' practice while they are on active service, or the lawyers who now are brought face to face with judicial rulings that throw legal precedent, their education and experience out of the window?

Or, are they the Lewises, the Greens, the Hillmans, to mention the most respectable of the lot, who have exploited the American people for the benefit of the Unions which they control in order to dominate the National economic and political scene with the object of substituting National Socialism for representative Democratic Government?

# It Is Happening Here

With the exception of a brief interlude under the leadership of Kerensky the Bolshevic regime took governmental control of Russia after the assassination of the Czar and his family in 1917. While accurate statistics are not available it is doubtful if this clique that seized control numbered three million of the more than one hundred and fifty million citizens of that great nation.

This two per cent group of all the people then proceeded to control and to govern the other ninety-eight per cent through the dictatorial actions of leaders such as Lenin and Trotsky.

Industry was confiscated, centralized and socialized.

Labor was made a servant of the state.

The professions were placed directly under state control and the outstanding individuals in those professions were either liquidated or ignored.

The farms of the country, an essentially agricultural nation at that time, were pooled under local communist control and the crops and produce from those farms were confiscated for so-called national use.

The actions of every citizen were not only constantly investigated by an army of government spies but those actions were tried and condemned by the same spies.

After the death of Lenin this destructive Russian revolutionary era soon evolved into the present dictatorship of Stalin. In this evolution it did nothing new. It merely followed the pattern of ancient and modern nations. The outstanding modern example is that of the French revolution which culminated in the leadership of the Emperor Napoleon.

Bolshevism succeeded in the overthrow of established institutions. But Bolshevism planted the seeds for its own failure. Revolution could not permanently substitute for evolution. It was merely a pontoon bridge over the narrow stream that flowed between identical fields of royalty and dictatorship.

In less than a hundred and seventy-five years

America has become the greatest and most powerful nation in the world. It has been known everywhere as "the land of the free," and it is the "free" who have made it great and powerful. Is it to follow the historic pattern and admit that its citizens are incapable of governing themselves and that they must be governed? If they are incapable of self government then the trend exactly parallels Russia and this trend as cited below should engage the careful attention of every thoughtful man and woman.

In America, to a great extent, industry has been financed, centralized and control over it divided between its management and the commissars of the proletariat.

Labor, after creating its own Frankenstein, learns that the monster it built is now its master.

The medical profession is threatened by Federal subsidization, regulation and control. The legal profession has no legal foundation. Laws are not interpreted according to precedent, but according to the momentary opinions of men who are essentially politicians, not judges.

A great agricultural and stock-producing nation, its crops and herds and flocks have been restricted and destroyed. Even its own citizens did not have the opportunity to use them.

Commissions and boards and bureaus have issued regulations that affect the personal and business lives of everyone. Agents of these same Government excrescences enforce these regulations, dictate "ukases," or whatever you want to call these non-constitutional rules, under which everyone suffers.

These things that the American people have permitted Government to impose upon them cannot be excused on the grounds of being necessary to our present war effort. They were conceived and begun before the present war was thought of as a serious possibility.

War or no war, it is time to realize and understand the path upon which all of us have been led and that the war is merely used as a camouflage to hide the end of the path from our view.



# To Be Or Hope To Be

There is an old American expression that has been, and still is, applied to men who own more land than they can adequately finance. These men are known as "land poor." They are not only unable to carry the taxes on their land and to reduce any financial obligations that may stand against it, but they are also unable to carry the interest on such obligations.

There is another old saying that applies in exactly the same way—"to have a white elephant on your hands."

When the intelligent men under whose planning the wealth of America is being created consider the future tax burden under which this country will labor, these men cannot help but recognize these old sayings as truisms. They are not misled by the vapors of vacuous varmint and vampires who pose as intelligent experts and back their posing by ridiculous theories and equally ridiculous statistics.

Again there is an old saying that applies to mental misfits—"figures don't lie, but liars can figure."

The all-wise and beneficent father in Washington, through his Charlie McCarthys seems to voice thoughts that show that his ideas of the difference between producing and potential wealth are, to say the least, a trifle confused.

Oil or coal or any other substance underground is of no value and, therefore, does not constitute any wealth until it is brought into use. It must have wealth producing value. If we ignore this fact, and it is a fact, then we must admit that Russia is infinitely wealthier than the United States. Of course, the fact is true. Russia is not as wealthy as the United States. It is only the loose thinking of theorists that even raises a question about it in the minds of sensible men.

This country, particularly the South, has been deluded by the kind of loose thinking that has been prevalent among those who, for want of a better name or a more descriptive name, have been called national planners since 1933.

This country, particularly the South, has permitted itself to be lead by a group of Marxian malcontents who have sheltered under the shoulder of an adroit and popular politician.

This country, particularly the South, has permitted this exploitation because the intelligent people of the country were, and are, patriotic.

This country, particularly the South, must become aware of the fact that political party labels, like pure food labels, must tell the truth.

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## Loose Talk

A serious situation in the South and in the entire Nation has been created by the vast amount of loose talk concerning the Negro that has been indulged in either for political or labor organizing purposes.

No one regrets this situation more than the Southerner who understands the social, political and economic problems that exist in the relationship between the White and the Negro races. He has lived with it for generations and believes, and quite justifiably so, that he is the Negro's best friend.

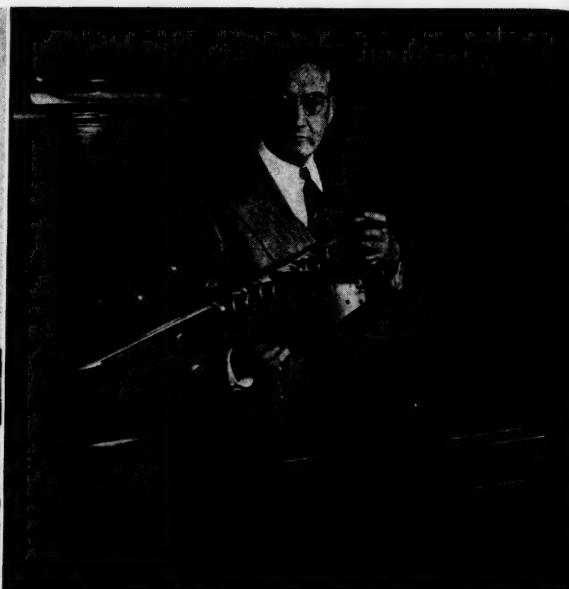
The Southerner recognizes the fact that it is the law of nature that a baby first crawls before it walks, and walks before it is able to run. He realizes that the White race, from the time of the Renaissance in Europe to the present, a time that includes the establishment of colonies in America by independent men, has had a distinct advantage over the Negroes who were then African savages or agricultural slaves and that by lending them a helping hand much more can be accomplished for their benefit than by appeal-

ing to their possible inferiority complex and arousing it to a spirit of thoughtless antagonism.

The Negro race is a valuable and valued part of the American population. It plays an important role in the drama of our national life. It is much too important to permit of exploitation by self-seeking carpet-baggers, be they White or Black.

The possibilities for mental development facing succeeding generations of Negroes are unlimited. Their race has already developed in a truly great manner. Booker T. Washington and George Washington Carver are but two examples of really great men.

The American Negro who, like the baby, has learned to crawl and is now learning to walk, will soon learn to run. Like the baby, he will learn with the help of the people who understand him and want to help him for his own sake, and who are honest and friendly and kindly enough to face the race problem unselfishly.



## Glenn L. Martin — Pioneer

**A**LLIED airpower, one of the greatest factors in World War II, owes its vast might to a few individuals. One of those men is Glenn L. Martin, who 35 years ago pioneered in aircraft by flying a pusher-type plane. It was just four years after the Wright brothers made their first sustained flight at Kitty Hawk, N. C. Since then Glenn Martin's name has become coupled with bombardment in the same fashion as Orville and Wilbur Wright's names are joined with flight itself.

For Martin has developed his aircraft production along two major channels since that August 1 day at Santa Ana, California, when he flew for the first time. His major concern, perhaps, has been the development of military aircraft for the Army and Navy, principally swift, hard-hitting bombers. In peace-time his primary concern has been over-ocean flying boats, as witness the Clipper ships of the thirties and the Mars, or JRM-1 type, for immediate post-war cargo and transport service.

Nine distinct types of planes, engineered and produced by the Glenn L. Martin Company, have participated in the present war.

by

John H. Lancaster

Six of those are bombers and the other three are Navy transport planes, carrying vital supplies swiftly to their destinations in various combat theaters. That his company has been able to contribute so immeasurably to the Allied war strategy is a source of extreme gratification both to Glenn Martin and to all who work for him.

Before Pearl Harbor, when the Japs began their drive into Burma and the East Indies, the courageous little Dutch air force stood them off for weeks. Much of their fine work was done in the B-

10 bomber, a plane originally designed in 1932 by the Martin Company. This was the bomber that obsoleted all other bombers of its day because it was faster than any other and equally as fast as all pursuit ships of the time. It won for Glenn Martin the coveted Collier Trophy of 1932.

Another fast bomber, the 167 Maryland, had originally been constructed for the French, but when France fell it was taken over by the R. A. F. It bore the brunt of bombardment in Egypt, in the Madagascar offensive and in the defense of Malta and is still in service as a trainer. The French and British even used the speedy bomber as a pursuit plane. The British wanted a larger attack bomber of similar qualities, so the 187 or A-30 Baltimore took the Maryland's place. This is still being produced in large quantities. It helped conquer Field Marshal Rommel's forces from El Alamein in the early autumn, 1942, until they bombed the last Afrika Korps division at Enfidaville in May, 1943. That bombardment caused the last division to surrender, thereby ending the North African campaign. The Baltimore later bombed Pantelleria, Sicily, Italy's

*Above—Glenn L. Martin, who 35 years ago pioneered in aeronautics by flying a pusher-type plane, is shown (left) before the first World War standing in front of one of his earlier models. In the view at the right, Mr. Martin holds a model of the Mars, big 75-ton flying boat. A replica of plane he used in his first flight is shown in the foreground.*

boot and east coast, working along with the British Eighth Army.

Most versatile of all is the B-26 Marauder, a swift medium bomber. It began its operations in 1942 as a torpedo plane at Midway and in the Aleutians and as a medium bomber in New Guinea. By downing 96 Zeroes to 6 Marauders lost and blasting New Guinea and New Britain and Jap shipping, the Marauder helped save Australia in those early days before other bombers could be rushed to that theater. A squadron of those same original, 65-foot-wing Marauders still are operating and the Japs call them "The Silver Fleet." The Marauders operated with the First Army in Tunisia, hammered the Mediterranean Islands last summer and fall, downed 53 enemy fighters in two days over Salerno in Italy, formed the second wave in the first and second Rome raids. From England over France, Holland and Belgium, Marauders have participated in 6,700 raids with only three-tenths of one percent loss, causing it to be termed the safest airplane in combat in Europe.

The PBM-1 and PBM-3 Mariner patrol bombers have contributed greatly to the clearing of sea lanes for our convoys in the South Atlantic and Pacific. The recent Pacific areas opened up by the victory at the Marshalls—a total of 360,000 square miles of water—is currently being patrolled by Mar-

Below—A Martin patrol bomber built at Middle River for the United States Navy. These planes, known as Mariners, have been important factors in clearing sea lanes for allied convoys.

iners. Other Mariner transports are carrying supplies to Australia. The Mars recently went into transport service and has broken numerous world records such as its 4,375-mile non-stop flight from Patuxent, Md., to Natal, Brazil. It has carried a record cargo of 35,000 pounds.

All these achievements are a source of extreme pleasure to Glenn Martin, the only pioneer flyer still heading up a major company in this rapidly-expanding aircraft industry. For the company is one of the three largest in the nation. In addition to the Middle River plant, there are divisions in Canton and on Sinclair lane in Baltimore; numerous warehouses and offices scattered about the Monumental City; another plant at Omaha, Nebraska, and a division at Cleveland, Ohio.

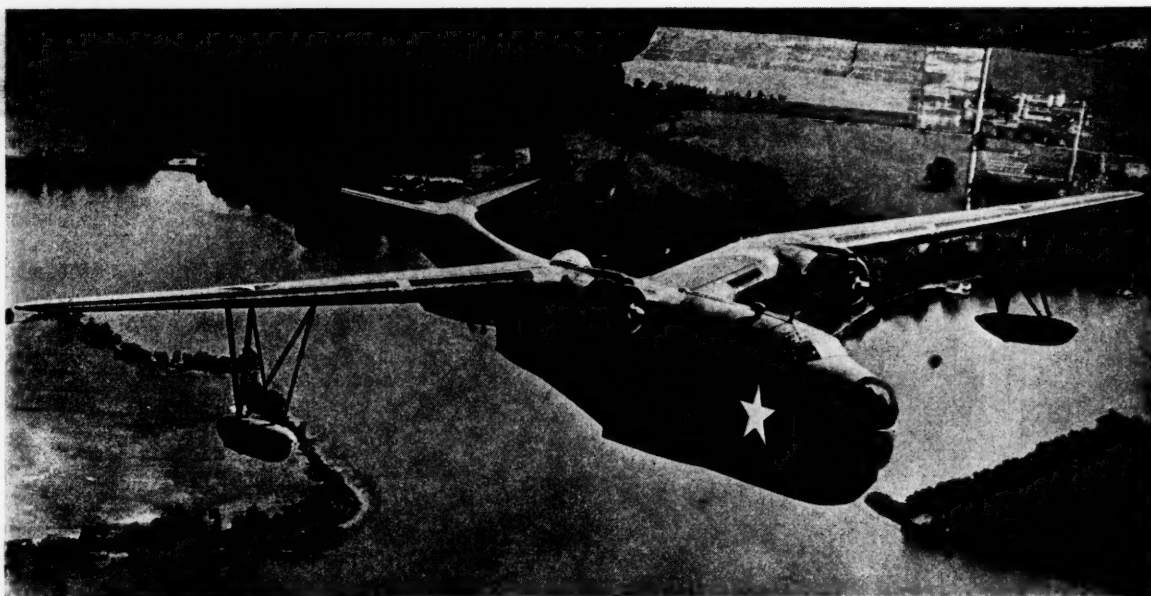
Martin was born 58 years ago at Macksburg, Iowa, to Clarence Y. and Armintha DeLong Martin. His mother, who has always been Glenn's principal source of inspiration, lives with him in Guilford, a Baltimore suburb. She has

become the Grand Old Lady of Aviation. The Martins moved to Liberal, Kansas, when Glenn was two. It was there that his interest in aviation grew. He built his first box-kites there and hunted ducks and prairie chickens, learning much from the fowl about basic principles of flight.

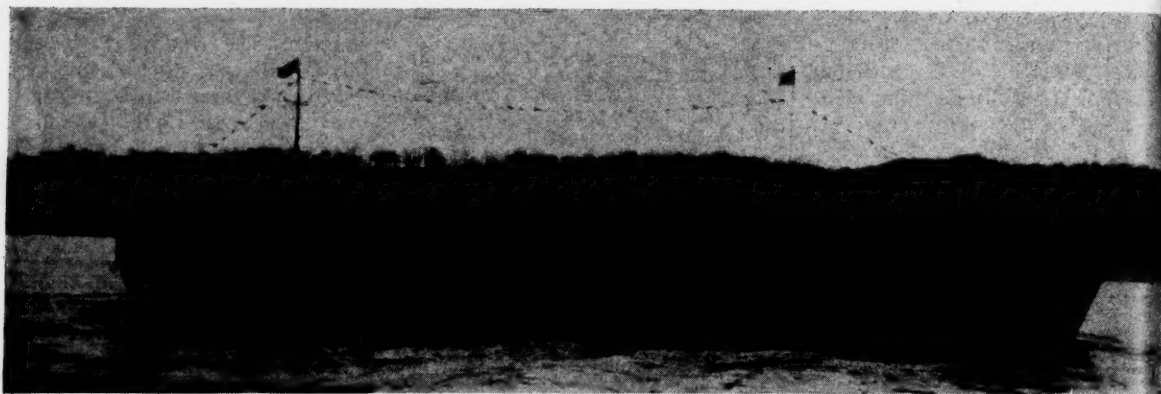
Following his college education at Kansas Wesleyan University, Martin turned to selling automobiles in Salina, Kansas. One day, early in 1905, the Salina papers carried a story of the Wright's first sustained flight. "It's like one of my kites with a motor in it," he told his mother. "I am going to fly, too."

Shortly after the Martins moved to Santa Ana. By 1908 Glenn acquired an abandoned Methodist church, which he used as his first plant to build his first pusher-type plane. A year later he flew for the first time. Then came those early days of barnstorming and flying at country fairs to raise money to build more and better planes. There were stints in the movies like the one with Mary Pickford in "The Girl of Yesterday." He holds the Expert Pilot's License No. 2 of the Aero Club of America and the international pilot's license (again one of the first to win it). He broke records, like the first over-ocean flight of any distance from Newport Bay to

(Continued on page 62)







# SHIPS SENT IN SECTIONS

*from Birmingham to Illinois for assembly*

**P**RACTICAL utilization of nearby raw materials is exemplified in the shipbuilding program of the Chicago Bridge and Iron Company which is pre-fabricating ship sections in their Birmingham, Ala. plant and shipping them to their yard at Seneca, Ill., where they are assembled into complete sea-going vessels of the LST (landing ship, tank) type.

Twenty or thirty years ago the practice would have been as it was in a great many industrial products, particularly those in the metal industries, to do the manufacturing at Northern points for

shipment to Southern locations. In this case the procedure is reversed—material is being fabricated at a Southern plant and shipped to a Northern location for installation — with attendant economies in time and money.

Chicago Bridge and Iron Company's shipyard at Seneca, Ill., was established in May, 1942. The first keel was laid the following month. The first ship was launched in December, and the rate of one ship a week was reached soon thereafter. A year later the first order for 40 LST's was completed, twenty-four days ahead of sched-

ule. New orders have been received for approximately twice as many ships as have been previously built. Production is still being expanded and several thousand more workmen are needed, both in Seneca and Birmingham.

Fabricated box sections of the vessels are welded in the Birmingham and Chicago plants and are shipped by rail to the Seneca yard where they are unloaded by crawler cranes and hoisted into place for final assembly.

LST ships are multi-compartment combat ships of welded construction and shallow draft with relatively flat bottoms for beach landing operations. During such operations hinged bow doors are opened and a completely enclosed ramp lowered.

The principle of prefabricating ships in box sections is not new with Chicago Bridge & Iron, nor do they claim that it is. However, so far as we can learn, this is the first instance in which the major part of a shipbuilding job has been done almost in the mouths of the mines supplying the basic raw material—iron, and located next door to the mines supplying the fuel for the blast furnaces and immediately adjacent to the steel mills which must cut and roll the plates for a ship.

*These box sections were fabricated at the Birmingham plant of the Chicago Bridge & Iron Co. for shipment to the company's shipbuilding division at Seneca, Ill., where they are used in construction of LST's—tank landing ships. Sections shown are ready for shipment. A finished LST is shown above.*





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# Another Giant "Cat Cracker" Starts Operations In the South

A SECOND giant fluid catalytic cracking unit, embracing the latest advancement in refining technique, recently went "on the line" at Humble Oil & Refining Company's Baytown, Texas plant to boost materially that plant's contribution to America's growing wartime demand for synthetic rubber and 100-octane gasoline.

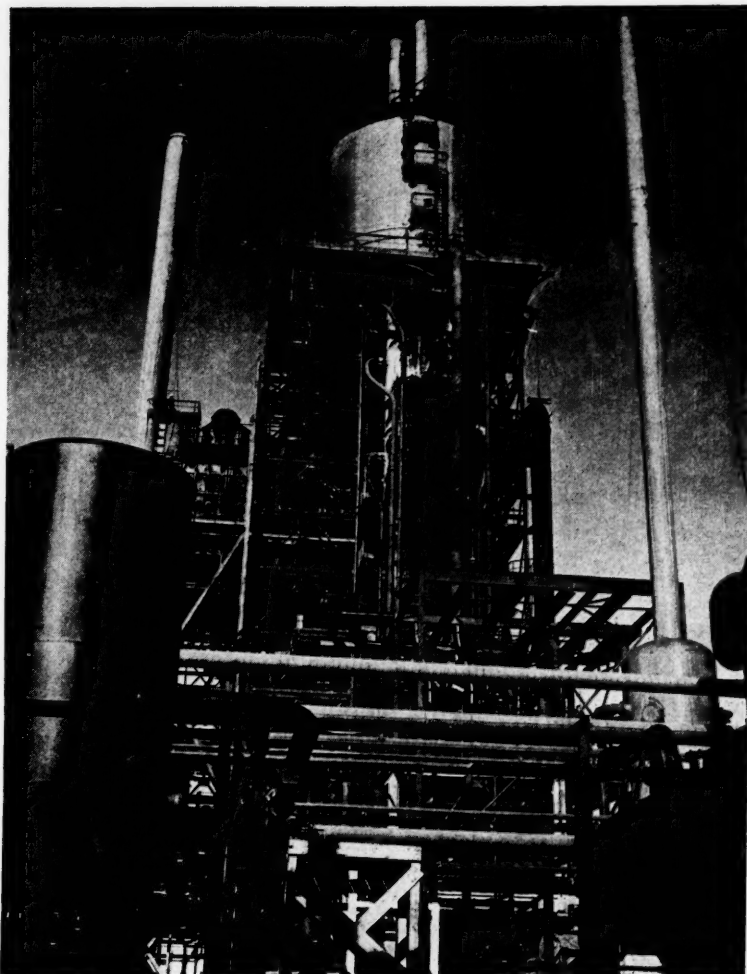
Humble's Baytown plant already holds the distinction of having produced more 100-octane gasoline and other critical petroleum war products than any other refinery.

The new structure, owned by the Humble Company, towers some 240 feet in the air. It takes its place in the Humble refinery as a flexible unit, capable of supplying raw material to any one of several very important war product finishing plants.

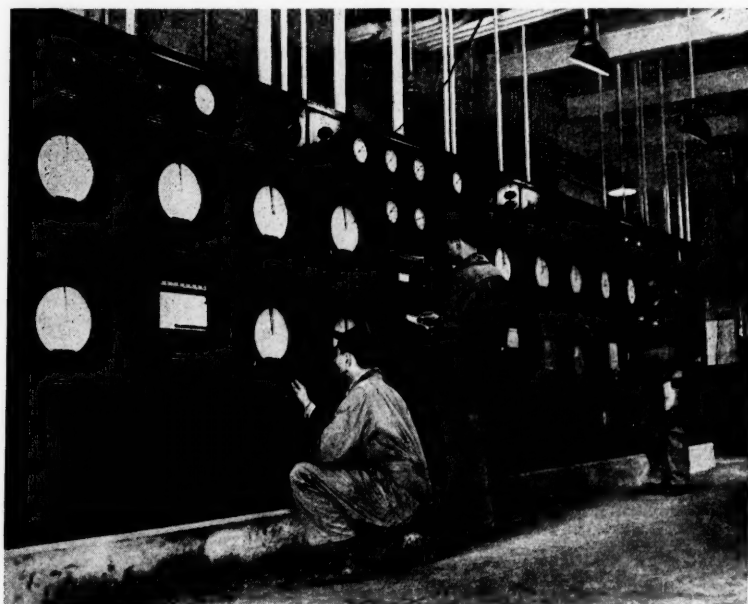
Iso-butane, iso-pentane, and pen-tylenes from the new unit will go principally toward the manufacture of aviation base stocks and 100-octane gasoline and components in greater quantities; the butylenes may go either into the aviation gasoline program, into butadiene, or into Butyl rubber when the Butyl plant adjacent to Baytown refinery goes into operation early this spring. Currently, however, it is anticipated that the butylenes will flow directly to the Butadiene plant to bring it up to capacity production of more than 30,000 tons annually for the first time since it was opened in August, 1943.

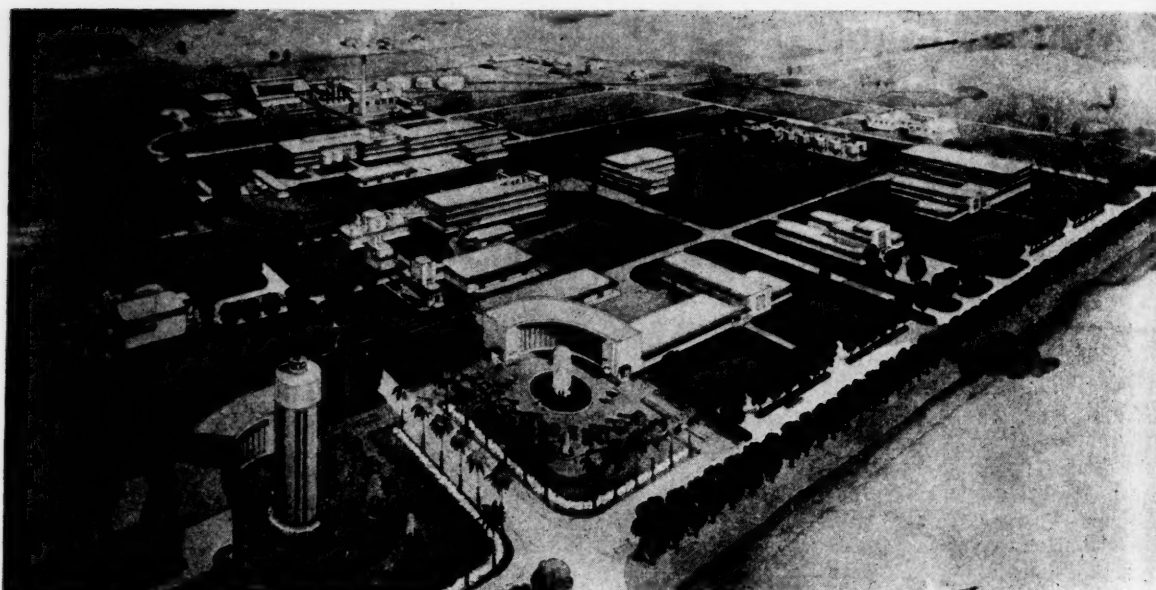
The new skyscraper's sister unit, also owned by Humble, which began operating late in 1942, is at present being charged with approximately 17,000 barrels of feed stock daily. The new unit is de-

(Continued on page 58)



Humble Oil & Refining Co. placed its second Baytown "cat cracker" on the line recently as part of the country's program to boost 100-octane and synthetic rubber production. The mammoth structure is 240 feet high and required 8,300 tons of steel in construction, exclusive of machinery.



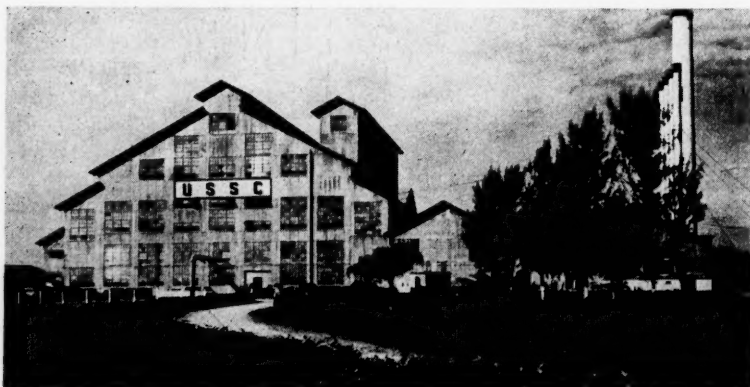


*United States Sugar facilities as they will appear when finished in Florida Everglades.*

## Everglades Sugar Concern Diversifies

*Annual output  
of starch will  
be 75 million  
pounds under  
\$20,000,000  
expansion plan*

*Diversification is the aim of U. S. Sugar officials. Raw sugar production will be augmented by an output of 75 million pounds of starch annually, in a new starch plant, part of a \$20,000,000 expansion program.*



UNITED States Sugar Corp., widely known for its developments in the Florida Everglades, has construction in progress on a number of projects in that area under a diversification program that will cost nearly \$20,000,000 and provide permanent employment for more than 7,500 workers, according to Clarence R. Bitting, the Corporation's president.

Making the announcement at the company's annual dinner held at Clewiston to the south of Lake Okeechobee, the liquid heart of the

3,000,000-acre area extending 80 miles east and west and about 120 miles east and west on the country's biggest peninsula. Mr. Bitting said the latest and best of scientific research has been applied to the design and will be used in operation of the new facilities.

He emphasized the success of private enterprise in reclaiming the "Glades" lands and cultivating them for production of sugar cane. "Demagogues are wont to make rosy but unfulfillable promises for the future," he said, but "here in the Everglades, private enterprise has fulfilled the promise before it was made.

"You have seen the provision of more than adequate housing for employees. You have seen the introduction of essential oil crops which today supply a critical and vital need of the nation. You have seen thoroughly proved the fact that the lake region is one of the best places in which to finish for market the livestock of the state. You have seen the sound growth and development of this beautiful city of Clewiston."

With these sentences he punctuated the accomplishments of the past, at the same time pointing to

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the promises for the immediate future of the Everglades by describing the projects now being built as part of the multi-million dollar program under which a starch house, a water supply system, a waste disposal unit and additional power facilities will be constructed.

The starch house buildings will cover six acres and yearly will produce 75,000,000 pounds of high grade starches and their derivatives, as well as by-product materials for manufacture of about half that amount of livestock feed. Sweet potatoes and other roots and tubers from 15,000 acres of "Glades" land will be used in the process.

Steam generating facilities now being installed will supply steam at 650 pounds pressure at the rate of 100,000 pounds an hour to be used to drive a 3,500-kilowatt turbo-generator producing 85,000 kilowatt-hours in each 24 hours to double the existing capacity. After performing the power producing function, the steam will be further used in the starch extraction and drying operation.

To prevent pollution of Everglade waters and soils, the company will treat waste disposal in new facilities southwest of the sugar house at Clewiston. Through use of microscopic organisms which abound in the region, part of the waste will be converted into gas of sufficient volume to operate additional boiler capacity at least one-third of the time.

A new Everglades landmark will rise as a result of the expansion. This will be a water tower 145 feet high and 50 feet in diameter. Its 250,000 gallons of water will supply water for general use as well as for fire protection. The adjoining water treatment plant will provide additional reservoir capacity totaling 500,000 gallons.

Water is to be brought five miles from Lake Okeechobee, the country's second largest body of fresh water, through 24-inch pipe, purified at the filtration plant and stored in the tower and reservoir. More than 20,000,000 gallons, or a quantity equal to the normal requirements of a city of 50,000 people, will be supplied by the system.



*Cultivation of sugar cane and extraction of raw sugar is a major Everglades activity. The sugar harvest last year lasted 203 days, beginning in October; ending in May. More than 588,000 tons of cane were handled.*

Facilities now in progress plus those planned for the postwar period will immediately utilize the production from upwards of 150,000 acres of "Glades" area; about triple that area in the postwar period. About one thousand of the 7,500 workers to be required will be highly skilled in such fields as mechanics, chemistry and engineering.

The Everglades, which Mr. Bitting said is entering a period of increasing value to the nation, is the vast, level, grassy plain covering a large part of lower Florida. It is usually flooded. At some time in the past, during its submerged period, limestone was deposited along the slightly covered bar to the east to form a limestone rim.

When the level of the sea fell and the land emerged, the Everglades area became an inland sea of shallow depth, gradually changing from salt to fresh water. This lake slowly became smaller until only its deepest part with a bottom approximately at mean sea level was left, thus forming Lake Okeechobee, where the United

States Sugar Corporation's activities are centered.

The true, or natural Everglades embrace something under 3,000,000 acres, although the Everglades Drainage District encompasses approximately 4,500,000 acres, or about 7,500 square miles. Three Florida counties—Broward, Dade and Palm Beach—contain about two-thirds of the district's area. Eight other counties are partly included in the "Glades" area. Ninety per cent of the Everglades, however, is in the tri-county region.

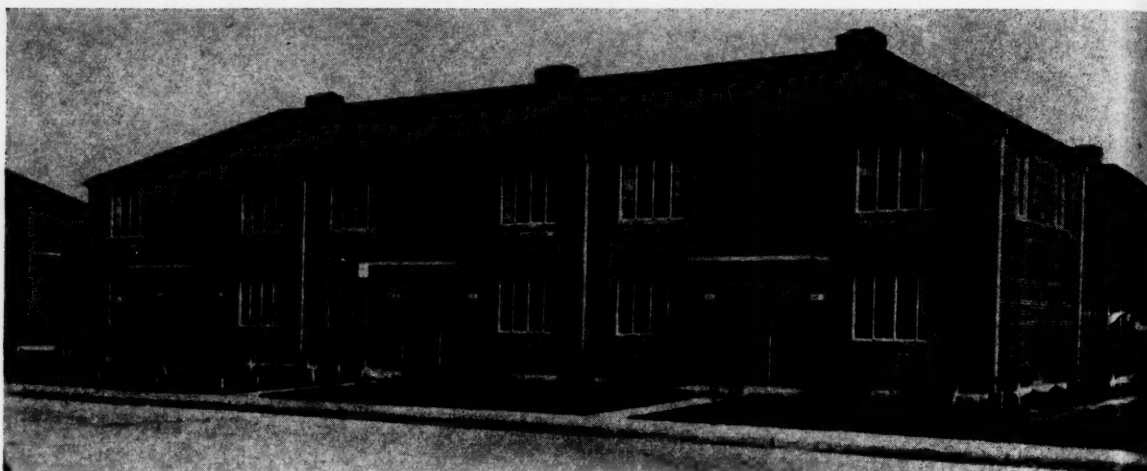
Everglades development had its inception almost one hundred years ago, when the legislature of the then newly admitted State of Florida directed attention to the potentialities of the region. Under an act of Congress in 1850 known as the "Swamp and Overflowed Lands Act," the Federal government turned more than 20,000,000 acres over to the State of Florida for purposes of reclamation.

A contract was made in 1881 to drain a large area of lands border-

*(Continued on page 68)*

*Sugar Office Building near Clewiston*





## Norfolk Looks Ahead

**I**T has been freely predicted since earliest colonial days that Norfolk would some day become one of the greatest ports in the nation. Present indications are that the prediction is destined for fulfillment in the postwar period. Natural advantages, present facilities and careful planning of far-sighted citizens form a combination that should bring those prophecies to realization in this generation.

Business men, bankers and industrialists in Norfolk frankly admit that in the past they have paid too little attention to bringing in new industries and relied too much on local trade created through large payrolls of the naval operating base and the navy yard. This was especially true after the first World War. Whatever shock may come following cessation of present hostilities, and if there is to be a lessening of demand for shipbuilding and maintenance and repairs, as well as reduction in military and naval payrolls, the purpose is to cushion this shock by bringing in new enterprises to utilize the advantages that are abundant. The outlook, by reason of inquiries already being made on the part of concerns who are attracted to the South, indicates Norfolk is working along the proper lines to realize her great industrial future.

War has brought to Norfolk, and the Norfolk area, an unprece-

### population doubled, Virginia city plans for permanent diversification of its industry

dent boom which was to be expected when one realizes the vastness of its harbor, Hampton Roads, its naval works, coal docks and strategic location. The planners and thinkers there do not like the word "boom"; rather, they feel the war has brought to Norfolk an opportunity of becoming a great port on the eastern seaboard, and an outstanding industrial center of the South. In taking this view they do not do so with the fanfare and cheery mood of the professional "booster" who whoops it up

Norfolk's population was 144,332 in 1940; estimates place the present population at 305,000. Erection of 23,000 permanent and 32,500 temporary family units have helped solve the housing problem. One of the buildings of the Merrimac Homes project is shown at top of the page.

at the luncheon club, singing songs and giving "pep" talks only to be left glassy-eyed when a new industry or factory goes on to another town. In Norfolk they have made careful study of their resources that will attract industry, and from this study has come a full realization of Norfolk's potential greatness.

Norfolk's population was 144,332 in 1940. Today an estimated 305,000 reside within its corporate limits, and preliminary figures from a census now being taken indicate the estimate may be low by about 15,000. Large numbers of these newcomers are skilled workers who have found employment in shipyards, on coal docks and with smaller activities. A survey recently conducted reveals that among these workers, many of them women whose husbands are stationed in the military or naval service, there are more than a few who have declared their purpose to remain after the war. Of course their concern is for adequate employment when war's demands cease, but they are pleased with their environment and it is to provide their subsequent employment that civic leaders are giving careful thought to diversified postwar industrial expansion.

Like other cities whose populations have been swollen by war activities, there have been housing problems and these continue to

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some extent. The erection of 23,000 permanent family units and approximately 32,500 temporary units in Norfolk and vicinity has partially alleviated the situation. A continuing program of permanent construction will bring complete relief, and serve to induce the most desirable workers to remain after the war.

For a few years preceding Pearl Harbor, remembering the let-down that followed the first World War, certain leaders in Norfolk were quietly at work, inducing new industries to come there. It cannot be said that any of them are particularly large, but they are substantial with payrolls numbering from 50 to 750 persons. These efforts to keep industrialists and manufacturers well posted on the port's advantages have been continuous and are destined to bear fruit in the form of widely diversified postwar manufacturing.

At present there are more than 300 industries established and operating there. They range from shipbuilding to jute bags; from agricultural implements to veneers; from soy bean processing to silverware. Shipbuilding and ship repairs are naturally the largest industries, but large railway shops, fertilizer factories and other enterprises of a permanent nature will play their parts in maintaining industrial progress.

The great harbor of Hampton Roads, capable of sheltering all of the navies of the world, is the greatest natural asset of Norfolk. Ice-free throughout the year, and with less than sixty percent of its shoreline developed, it is estimated that sufficient docks could be built there to handle all of our European and Latin-American imports and exports for years to come.

Shipping and shipbuilding experts do not see the ending of this war as bringing any immediate and severe curtailment of maritime construction and repairs. Their reasoning is logical. First, they say, the nation will never again scrap its navy, but will maintain a two-ocean navy, the Atlantic fleet of which will be far greater than our entire navy prior to Pearl Harbor. Secondly, they aver the Liberty ship, although it has performed a major war task,

Shipbuilding is one of Norfolk's important industries. The U.S.S. Shangri-La, shown below, is the product of the Norfolk navy yard. Man-days required in constructing the 27,500-ton aircraft carrier totaled 750,000.

by

McLellan Smith

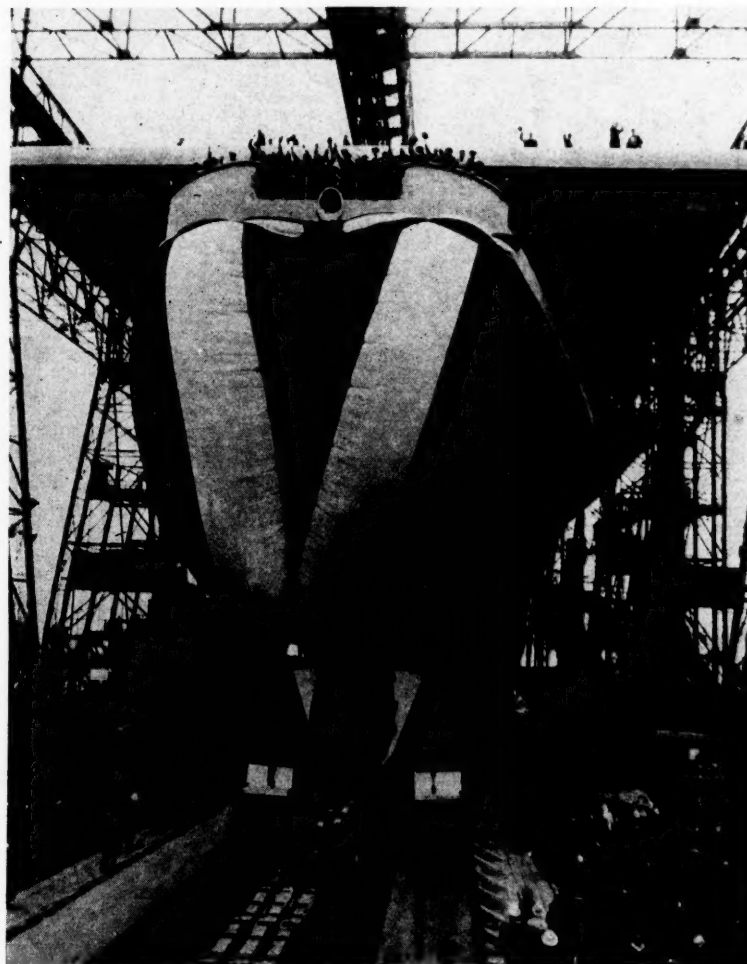
will have to make way for bigger, faster and stronger ships if our merchant marine is to maintain top position in coming competition for world trade.

Adding to the importance of the harbor is the system of rail transportation now entering Norfolk and the harbor area. Eight carriers radiate from the port, three of them reaching into the great

New River and Pocohontas coal fields, making Hampton Roads the largest coal trans-shipment point in the world. Supplementing the excellent rail service, in normal times, are intercoastal, coastwise and overseas steamship lines. In addition, reliable bay and river lines reach points on Chesapeake Bay, in Virginia, Maryland and the District of Columbia.

Development of military and naval airports in Norfolk and adjacent sections, its central location on the Atlantic coast, quite naturally point to it as a logical western terminal for one or more of the trans-Atlantic air services that will come with the peace. Pennsylvania Central Airlines, already operating in Norfolk, has filed with the Civil Aeronautics Board a petition to establish there a large terminal of a proposed route from Norfolk to Miami and other south-

(Continued on page 64)





# Southern Contracts Steady in February

**S**OUTHERN construction was steady during February with the \$63,844,000 total for contracts below the Mason and Dixon line practically equalling the figure for the preceding month. Increased strength in highway and other engineering construction served to bolster the month's total in face of declines in private building and industrial construction.

Approximately sixty-three per cent, or \$40,036,000 of the February total was concentrated in the southwest and the four southeastern states of North Carolina, Georgia, Florida and Alabama, the total for the latter group being \$21,560,000. Virginia and Maryland accounted for \$13,685,000 of the balance. Texas ranked first among the sixteen states with a total

of \$13,589,000. Florida was runner-up with an aggregate of \$9,161,000. Virginia's \$9,080,000 occupied third place.

War industry construction has followed the requirements necessitated by changes wrought by the world wide conflict now being fought. The South, always an important factor in the country's petroleum industry, has for many months past been the scene of a rapidly expanding gasoline

industry. Twenty such plants either are completed or will be finished this year in five southern states.

Synthetic rubber production is closely allied with the petroleum output. The program to establish the "synthetic rubber plantations" in this country has involved around \$700,000,000—much of which was expended in the South. An additional \$30,000,000 has been allotted to improve the plants already built. As many of these are located in the southwest, a large proportion of the total is expected to be spent there. Three million dollars will go to smooth out manufacture of butadiene from alcohol. Two of the three plants using this process are in the South.

New problems in tire manufacture arising from use of the synthetic product are resulting in variations in manufacture which may mean construction of new facilities. One such project is in the course of preparation for a southern community. The proposed plant is understood to be one of the first of its kind to spring from the synthetic rubber situation. Others have been proposed.

Expansion of the country's rayon industry, large units of which are located in the South, was ordered several months ago to meet rayon cord requirements for the manufacture of synthetic rubber tires. Three of the four producers mentioned operate in the South and facilities in two states below the Chesapeake Bay are to be augmented in compliance with the command. One of the expansions involves \$7,000,000.

The South has long been a bulwark of the country's aluminum industry. Aluminum Company of America has poured many millions of dollars into southern facilities. Reynolds Metals Corp. has participated in recent further expansion. Arkansas bauxite has been used extensively as the result of a federally financed project. The latest plant for this purpose is a new \$2,640,000 experiment being built in a southern coastal state for making the alumina from clay and limestone.

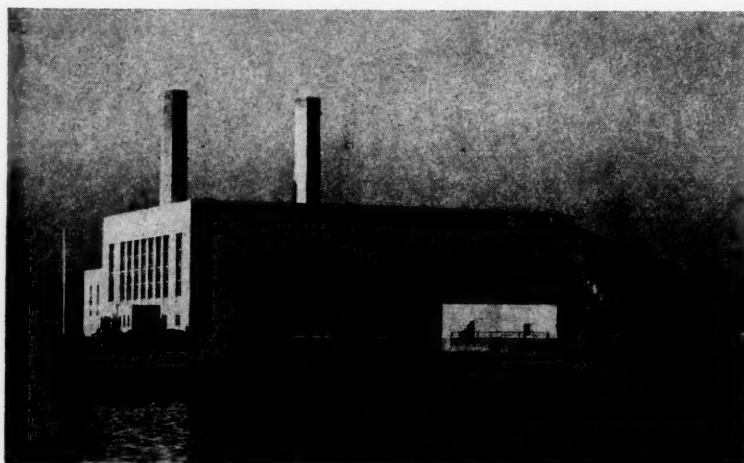
Railroad construction is proceeding in several coal areas. One project will open an entirely new coal deposit, the development of which is to take several years and involve installation of much mining equipment and establishment of modern living quarters for the miners and their families.

Where the next industrial construction will take place is open to conjecture. The food problem is becoming paramount. Perhaps the next move will be in the food preservation field—canning, dehydration,

**Left**—Buzzard Point plant of Potomac Electric Power Co., Washington, D. C., where a new 50,000-kilowatt turbo-generator will be installed as the result of priority restoration by the War Production Board.

## South's Construction by Types

|   | February, 1944<br>Contracts<br>Awarded | February, 1944<br>Contracts<br>to be<br>Awarded | Contracts<br>Awarded<br>First Two<br>Months<br>1944 | Contracts<br>Awarded<br>First Two<br>Months<br>1943 |
|---|--|---|---|---|
| <b>PRIVATE BUILDING</b>   |  |   |   |   |
| Assembly (Churches, Theatres, Auditoriums, Fraternal) .....       | \$ 118,000                             | \$ 1,025,000                                    | \$ 347,000  | \$ 205,000  |
| Commercial (Stores, Restaurants, Filling Stations, Garages) ..... | 82,000                                 | 135,000   | 260,000   | 111,000   |
| Residential (Apartments, Hotels, Dwellings) .....                 | 6,311,000                              | 7,956,000                                       | 15,450,000  | 12,678,000  |
| Office .....  | 10,000                                 | 500,000   | 10,000  | 10,000  |
|   | \$ 6,521,000                           | \$ 9,616,000                                    | \$ 16,067,000                                       | \$ 13,004,000                                       |
| <b>INDUSTRIAL</b> .....   | \$11,510,000                           | \$ 10,511,000                                   | \$ 23,549,000                                       | \$ 23,505,000                                       |
| <b>PUBLIC BUILDING</b>  |  |   |   |   |
| City, County, State, Federal .....                                | \$14,502,000                           | \$ 18,067,000                                   | \$ 29,634,000                                       | \$ 91,755,000                                       |
| Housing .....   | 6,825,000                              | 6,405,000                                       | 12,002,000  | 55,032,000  |
| Schools .....   | 828,000                                | 6,461,000                                       | 1,767,000   | 2,103,000   |
|   | \$22,155,000                           | \$ 30,933,000                                   | \$ 43,403,000                                       | \$148,890,000                                       |
| <b>ENGINEERING</b>  |  |   |   |   |
| Dams, Drainage, Earthwork, Airports .....                         | \$14,968,000                           | \$ 16,127,000                                   | \$ 30,461,000                                       | \$ 27,271,000                                       |
| Federal, County, Municipal Electric .....                         | 152,000                                | 125,000   | 186,000   | 875,000   |
| Sewers and Waterworks .....                                       | 2,565,000                              | 22,238,000                                      | 4,246,000   | 6,189,000   |
|   | \$17,585,000                           | \$ 38,490,000                                   | \$ 34,893,000                                       | \$ 34,335,000                                       |
| <b>ROADS, STREETS AND BRIDGES</b> ..                              | \$ 6,073,000                           | \$ 35,434,000                                   | \$ 9,828,000  | \$ 16,747,000                                       |
| <b>TOTAL</b> .....  | \$63,844,000                           | \$124,984,000                                   | \$127,740,000                                       | \$236,481,000                                       |



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refrigeration. Faster freight ships to carry both food and other supplies to far off battlefields are also in the offing. Their production will require some changes in present facilities. These will involve construction expenditures.

The largest factor in the February total was public building with its total of \$22,155,000. Engineering construction awards followed with \$17,585,000 and industrial contracts with \$11,510,000. Private building amounted to \$6,521,000; highway and bridge construction, \$6,073,000.

Highway and bridge contracts showed the largest gain over the preceding month. Compared with January's \$3,755,000, February highway and bridge awards were up almost sixty-two per cent. In the other two fields of work where increases were recorded—public buildings and engineering—the rises were four and two per cent, respectively.

Southern construction so far this year, when contrasted with the first two months of 1943, represents a decline of forty-six per cent. Private building, industrial and engineering construction show increases in comparison. Public building contracts and highway work is down. The slackening pace in government building is responsible for the over-all drop. Where last year at this time, the total for government work was \$148,890,000, this year it is \$43,403,000.

The trend of southern construction parallels approximately that forecast for the country. Federal estimates this year place the level at fifty-one per cent of the 1943 value. Contracts in the South are now about fifty-five per cent of what they were in the same period of last year.

Opinions expressed by prominent private authorities at the beginning of the current year indicated the expectation that private dwelling construction and road building would rise. Private dwelling construction has increased almost twenty-two per cent in January and February. Road contracts, while showing encouraging signs in the second of the two months, have not advanced to last year's level.

Similarity in the size of industrial contract totals for the first two months of last year and this year, with the latter having a slight edge in the comparison, may be a favorable harbinger of projects to come. Although the War Production Board is adamant in its attitude on con-

| South's Construction by States |                     |                         |   |   |
|--------------------------------|---------------------|-------------------------|---|---|
|                                | February, 1944      | February, 1944          | Contracts Awarded First Two Months 1944 | Contracts Awarded First Two Months 1943 |
|                                | Contracts Awarded   | Contracts to be Awarded |   |   |
| Alabama .....                  | \$ 7,752,000        | \$ 3,434,000            | \$ 10,752,000                           | \$ 11,821,000                           |
| Arkansas .....                 | 352,000             | 4,423,000               | 447,000                                 | 15,987,000                              |
| District of Columbia .....     | 2,623,000           | 715,000                 | 3,472,000                               | 1,613,000                               |
| Florida .....                  | 9,161,000           | 24,925,000              | 19,986,000                              | 26,806,000                              |
| Georgia .....                  | 2,183,000           | 9,194,000               | 5,550,000                               | 18,551,000                              |
| Kentucky .....                 | 574,000             | 1,653,000               | 813,000                                 | 3,298,000                               |
| Louisiana .....                | 2,284,000           | 2,443,000               | 6,618,000                               | 6,824,000                               |
| Maryland .....                 | 4,605,000           | 12,915,000              | 10,350,000                              | 15,833,000                              |
| Mississippi .....              | 1,141,000           | 1,910,000               | 3,189,000                               | 8,031,000                               |
| Missouri .....                 | 1,336,000           | 1,925,000               | 3,026,000                               | 2,576,000                               |
| North Carolina .....           | 2,464,000           | 4,527,000               | 4,955,000                               | 10,616,000                              |
| Oklahoma .....                 | 2,251,000           | 2,804,000               | 3,991,000                               | 8,628,000                               |
| South Carolina .....           | 1,634,000           | 20,174,000              | 5,250,000                               | 6,060,000                               |
| Tennessee .....                | 1,818,000           | 2,758,000               | 3,811,000                               | 20,613,000                              |
| Texas .....                    | 13,589,000          | 23,928,000              | 28,806,000                              | 58,687,000                              |
| Virginia .....                 | 9,080,000           | 6,796,000               | 14,047,000                              | 20,319,000                              |
| West Virginia .....            | 997,000             | 460,000                 | 2,275,000                               | 248,000                                 |
| <b>TOTAL .....</b>             | <b>\$63,844,000</b> | <b>\$124,984,000</b>    | <b>\$127,740,000</b>                    | <b>\$236,481,000</b>                    |

struction possibilities for industry, it has restored priorities for power plant expansions in four southern states.

Discussions of postwar possibilities continue. In the industrial field, conversion from war to peacetime products is foremost, as well as establishment of new plants and additions to others on which work has been delayed because of present war conditions. The promotion of housing construction is high on the list. Highway construction programs are being backed by powerful groups.

A national organization of building material and equipment manufacturers urges state legislation to encourage large

investments in apartment house erection in the postwar era. A market for units to house several million families is predicted. The proposal is aimed at stimulation of a greater volume of well-planned and well-built properties in better community environment.

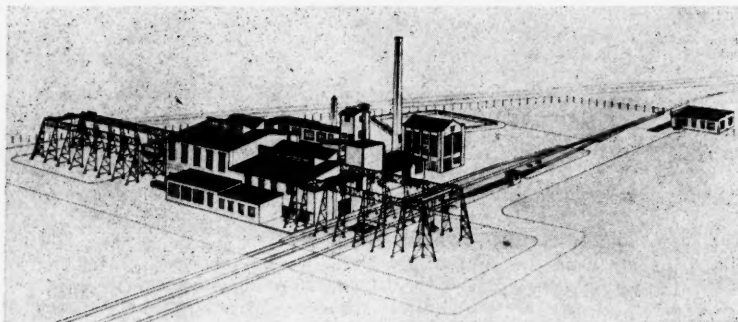
Postwar highway construction may amount to \$1,000,000,000 yearly, if pending legislation is approved by Congress. Representative J. W. Robinson, chairman of the House committee on roads, last month expressed the opinion that early action would be taken on the bill. The program, he observed, is expected to make work but not be a make work program.



Right — The \$2,000,000, 30-story tower annex shown in the illustration is planned as a post-war addition to the Henry Grady Hotel at Atlanta. Its steel, stone and concrete structure will house rooms air conditioned for both winter and summer, with a merchandise mart, radio broadcasting and receiving facilities and many other innovations for the convenience of guests. A drive-in garage for 150 cars, a convention room and a swimming pool are part of the plan which will make the Henry Grady one of the largest hotels of its kind

# Birmingham's Detinning Plant

*—it will shred, clean and salvage cans from lower South and Southwest*



**A** HUGE tin can detinning plant, devoted exclusively to separating badly needed tin and steel scrap from containers turned in by housewives in tin collection drives, is a new enterprise located at Birmingham, Ala.

The plant has a capacity of 20,000 long tons per year and is able to detin approximately 300 million No. 2 tin cans, average household size, annually. Cans will arrive from as distant points as Miami and Dallas and Fort Worth, although the principal supply will come from the states South of a line drawn across the northern boundaries of Alabama, Georgia and South Carolina. Both the tin and the steel scrap salvaged from tin containers are needed for important war purposes and both must be separated before either can be reused.

The plant contains four principal buildings with a total area of more than 50,000 square feet of floor space. The buildings consist of a preparation building, chemical building, boiler house and office. They are of concrete block construction with wood trusses and were built with a minimum of critical materials, according to Ferguson engineers.

The cans will be brought to the plant from various collection centers by truck and rail, after housewives have "prepared" them by removing the label, cutting off the ends and inserting them into

the flattened can and washing them thoroughly.

Provisions have been made to also handle those cans which cannot be prepared. They are given a preliminary processing during which they pass through a shredding machine to be ripped apart and then through an 85-ft. incinerator which chars off labels, food particles and other foreign matter. The temperature in the incinerator is about 425 degrees Fahrenheit, which is high enough to reduce the extraneous matter to ashes, but not sufficiently high to alloy the tin and steel. They next go through a water spray to remove the charred fragments and to cool the shredded cans.

The cans are then conveyed to a large detinning drum, where they are submerged in a chemical solution which dissolves the tin coating from the steel body of the can. The chemical bearing solution is purified and dried to produce tin oxide. The steel is hydraulically baled and shipped to blast furnaces, while the tin oxide is packed in bags for shipment to smelters.

The process at the plant is mechanically operated. Equipment consists principally of tanks, conveyors, various types of cylindrical drums and hundreds of feet of process piping.

This plant was designed and built by The H. K. Ferguson Company, Cleveland, O., and is owned by Defense Plant Corporation. It

is being operated for DPC by The Southern Detinning Co., Birmingham, and DPC has signed a management contract with The Johnston & Jennings Co. of Cleveland—who have been engaged in the detinning business since 1892—for the overall supervision of the operation.

## Western Hemisphere's Only Big Tin Smelter in Texas

**T**IN is now smelted at Texas City, Texas, at what is the only major operation of its kind in the Western Hemisphere. First tin came from the plant's furnaces on Easter Sunday, April 5, 1942. The project originated with an agreement signed late in 1940 for purchase of ore from Bolivia, an event which was followed by signing of a contract with N. V. Billiton Co. for construction of the new facilities at Texas City.

The attack on Pearl Harbor and subsequent loss of the two large tin smelting centers of Singapore and Penang to the Japanese resulted in greatly expanded plans and increase of the original proposed capacity to an equivalent of smelting capacity available at the time to the United Nations, in face of possible enemy action against projects in other parts of the world.

Ores from different countries and even ores from different mines must each be treated differently, the processes being predetermined in the laboratory. Chemically pure tin ore—a mineral called Cassiterite—would have a tin content of 78.76 per cent. Actually, however, the ores with which modern producers have to work range from those containing 76 per cent tin to those that have only 18 per cent tin.

(Continued on page 56)

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# Outstanding Development Work And Its Efficient Director

THERE are two distinct activities of the Department of Conservation and Development of the State of North Carolina: one that functions entirely within the State's boundaries and the other that advertises the State's merits before the nation and the world. Both activities are under the general supervision of the director of the department, R. Bruce Etheridge, small town banker and North Carolinian by birth and family ties that extend through several generations.

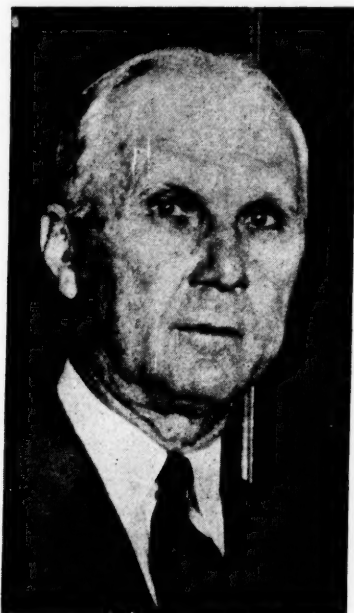
Within the State the department correlates the activities of these divisions: Mineral Resources, Water Resources, Commerce and Industry, Forestry, Game and Inland Fisheries, Commercial Fisheries, and State Advertising. Of these the last, which advertises the State before the world, was added in 1937.

The original appropriation for advertising was \$250,000 for the biennium of 1937-38. That amount has been expended for that purpose during each succeeding biennium. The program was divided into three fields: tourist, commerce and industry, and agriculture.

This advertising program had produced a grand total of 163,444 inquiries from the outside world through January of this year. The program has been curtailed during the last two years, as the tourist phase of the promotion has been suspended.

There is no way to check with exactness the number of farms sold as a result of the advertising, because of the manner in which inquiries are handled. The advertising division does not make sales; it sends out printed literature about the State, under whatever headings as are requested, and the inquiries are then circularized to the farm sales agents throughout the State.

Because North Carolina has 276,278 farms, as of 1940 census, there are always a few—and good ones—on the market by virtue of



R. Bruce Etheridge

death and changes in family status of the owners.

The inquiries that come in from individuals or established firms seeking to open commercial operations are handled by the Commerce and Industry division of the department. No figures of overall nature are made public in this regard, but some of the nation's leading industries have established

by  
GARLAND B. PORTER

branches in the State, in collaboration with the Department, ranging from the three plants of National Carbon Company to the small shops and plants that employ a few workers. One of the very latest such is the Strickland Aircraft Corporation of High Point.

It was fitting that this general operation was placed under the directorship of Bruce Etheridge. Born and raised on Roanoke Island, on the Carolina east coast, where went the first settlers sent out by Sir Walter Raleigh, he is an alumnus of Old Trinity, which be-

came Duke University in the middle twenties.

It has been said that on the outer banks and islands of North Carolina's coast one finds a people as reminiscent of Queen Elizabeth's England as in most parts of the English Isle itself.

Bruce Etheridge has friends in almost every hamlet, as well as city, in the state. He fits the description of small-town banker, which is his background at Manteo, the small town on Roanoke Island. And small town bankers are probably the smartest individuals in this State of small towns. They have to know and they have to be careful.

Bruce Etheridge is that—careful. He does not rush around and he does not get in a fluster. He is a man's man, and has an appreciation of the outdoors and sports. He knows the exact distance to lead a duck at Currituck's famous shooting stands; and he can figure pretty close to how the annual football games will end between the University of North Carolina and the perennial rival, Duke. He also likes baseball and basket-ball and track. You are likely to see him at most any gathering of Duke Alumni, or any other important gathering in the State, for that matter.

The advertising program of the State has often been called a model of its kind. Based only on facts, and never seeking to present distorted "news," the releases of the Bureau of Advertising and News get fine reception from the press of the nation. Much of this has grown from Bruce Etheridge's dictum not to allow any suggestion in a story not entirely and probably true.

Before appointment to the post of director of the Department of Conservation and Development, Mr. Etheridge had been a member of that Board, appointive by each governor, for a number of years. It might be briefly and truly said that he knows the State and the State knows him.



# Southern Industrial Expansion during February

## ALABAMA

**ANNISTON**—Magnesium Plant—Sanderson & Porter, 52 William, New York City, has contract for magnesium plant to be erected at Anniston; \$1,000,000.

**ATMORE**—Factory—Gilbert Brereton, of Toronto, Can., will establish factory to de-bark stalks ramie, to be sent elsewhere for processing into fabric; leased about 150 acres of ramie.

**BIRMINGHAM**—Expansion—Alabama Power Co., Birmingham, preparing surveys and studies of postwar requirements; plants to include a large rural construction program.

**BIRMINGHAM**—Warehouse—Charles H. McCauley, Jackson Bldg., Birmingham, preparing plans for warehouse for Crane Co., J. J. Venerable, Mgr., 2 S. 20th St.; cost \$75,000.

**CLANTON**—Locker Plant—M. L. White, Clanton, has contract at \$20,000 for locker plant for Chilco Locker Storage Co., Inc., Luther Little.

**SHAWMUT**—Locker Plant—Valley Freezing Corp., Lanette, plans locker plant; 250 lockers; Robert & Co., Archts., Bona Allen Bldg., Atlanta, Ga.

## ARKANSAS

**CONWAY**—Expansion—Ward Body Works, Dave H. Ward, pres., started work on \$10,000 brick and steel building; enlarge output of buses.

## FLORIDA

**CLEWISTON**—Starch Plant—United States Sugar Corp., Clarence R. Biting, Pres., has plans completed by J. B. McCrary, Marietta St. Bldg., Atlanta, Ga., for construction of \$7,000,000 starch plant, a part of \$20,000,000 Everglades expansion program; work to be started immediately.

**PENSACOLA**—Establishment—Hardaway Contracting Co., plans establishing place for waterfront equipment and other industrial development.

## GEORGIA

**ADEL**—Expansion—G. H. Talley & Sons, manufacturing cleats, plans expansion of plant to manufacture veneer.

**ATLANTA**—Expansion—Defense Plant Corp. granted additional funds to Firestone Tire & Rubber Co., Akron, Ohio, to provide additional facilities at plant in Atlanta; \$130,000.

**COCHRAN**—Kiln—G. B. Hill Lumber Co., will erect new lumber kiln and a conveyor system and pumping system is being installed.

**SAVANNAH**—Sugar Cane—Niels B. Bach, formerly of Denmark, acquired 800 acres of land on Ogeechee Road conferring with Mills B. Lane, regarding establishment of plant for manufacture of syrup and industrial alcohol; new company will operate as Savannah Sugar Farms and Research Laboratories.

**SAVANNAH**—Property—Edward J. Derst, president of Derst Baking Company, acquired additional property, which will double the present size of company; new addition consists of lots totaling 90x30 feet on York St., Price St., and York Lane; to be converted into storage and garage facilities; addition is adjacent to the present location of company at Oglethorpe Ave., and Habersham St.; firm also owns site on Mills B. Lane Boulevard, on which a large and scientific modern bakery will be erected; post-war construction.

**STATESBORO**—Milk Market—J. W. Cotter, field representative of the Foremost Dairies, interested in opening a fluid milk market in which the erection of a \$50,000 plant is involved.

**VALDOSTA**—Plant—Lester Poole, 2120 N. Ashley St. has contract, work under way, on gum spirits of turpentine packaging plant for Turpentine & Rosin Factors, Inc., G. P. Robinson, Vice Pres.

## KENTUCKY

**PERRY—HARLAN COUNTY**—Coal Mine Blue Diamond Coal Co., Inc., Alexander Bonnyman, Pres., Knoxville, Tenn., plans development of a \$3,000,000 coal mine and village; contemplate a one hundred car per day coal tippie to serve a mine to which the Louisville & Nashville R. R. Co. is building a 10½ mile main spur at cost of \$2,000,000; there will be almost 4 miles of load, empty, tippie and industrial tracks in this village, in addition to L. & N. main line; tippie site will be in Perry County at head of Clover Fork off Leatherwood, near Perry County, Harlan County and Leslie County; entire village, including schools, churches, bathing facilities, stores, shops, mine preparation plants of all kinds, equipment and de-

velopment, will be of high standard; approximately 50,000,000 tons of coal available to this tippie site; a highway from Harlan to Hazard in Perry County is also planned; village will consist of approximately 1200 houses.

## LOUISIANA

**BATON ROUGE**—Dehydrating Plant—Grass Products Co., C. F. Schuabe, President, will start work on grass products dehydrating plant at Klempeter Station; \$80,000.

**GREYNA**—Plant Improvements—Leo S. Weil and Walter B. Moses, Engrs., Audubon Building, New Orleans, preparing plans for the construction of 10 new steel fermenting tanks of 200,000 gallons capacity each at the plant of the Gulf Distilling Corporation at Gretna; \$125,000.

**NEW ORLEANS**—Foundation, etc.—R. P. Farnsworth & Co., Inc., 1515 S. Salcedo St., low bidder for piling and concrete foundation work for foundry and hammer shop, garage building and oil storage for Higgins Aircraft, Inc. at Higgins.

## MARYLAND

**BALTIMORE**—Addition—Millske Construction Co., 229 N. Collington Ave., has contract for addition to manufacturing plant, 2229 Kirk Ave., for Burns Bottling Machine Works; 1-story; brick and block.

**BALTIMORE**—Mill—Palapasco Forge Co., Inc., Fort Ave. and Lawrence St., plans mill building 323-44 Key Highway; owner builds.

**BALTIMORE**—Factory—Woodcraft Toy Manufacturers, Inc., 601 S. Longwood St., let contract to Alfred H. Kaufman, 901 S. Carey St. for factory; masonry; 1-story; 150x220 ft.; cost \$20,000.

**CUMBERLAND**—Cooling Plant—Embassy Fairfax Dairy, John D. Liebau agent will erect cooling plant at 407-15 Pennsylvania Ave.

**FAIRFIELD**—Duct System, etc.—Consolidated Engineering Co., 20 E. Franklin St., Baltimore, has contract for platen tables, duct system, etc. for Bethlehem-Fairfield Shipyard, Inc.

## MISSISSIPPI

**OKOLONA**—Hog Feed Plant—Consolidated Products Co., Danville, Ill., received priority to purchase boilers and establish hog feed plant; will occupy the Gulf, Mobile & Ohio R. R. property formerly used as stockyard.

**PASCAGOULA**—Equipment—Defense Plant Corp., entered into contract with Pascagoula Ice & Coal Co. to provide equipment at plant in Pascagoula to cost \$110,000.

## MISSOURI

**HILLSBORO**—Coke Plant—Illinois Coal Products Commission, will construct a \$35,000 experimental coking plant.

**ST. LOUIS**—Factory—Nat. Flyer, 59 W. Hubbard St., Chicago, Ill., has contract for factory, rear of 6400 Manchester Ave.; corrugated iron; 72x162x25x115 ft.; conc. found.; tar and gravel roof; conc. floor; cost \$20,000; Hamilton Engineering Co., 135 S. LaSalle St., Chicago, Ill., owner; Ned I. Sosna, Archt., 226 W. Jackson Ave., Chicago, Ill.

**ST. LOUIS**—Factory—Welsh Co., Albert D. Welsh, Pres., 1535 S. Eighth St., contemplates construction of factory and ware-

house; 2-stories; S. E. corner of Broadway and Thatcher Sts.

**ST. LOUIS**—Alterations & Additions to Building—Dickie Construction Co., 517 Londerman Bldg., has contract for alterations and additions to building at 3401 Morganford Road; Defense Plant Corp., c/o National Magnesium Casting Corp., 8025 S. Broadway, owner; W. J. Knight & Co., 908 Wainwright Bldg., Engr.-Archt.

**ST. LOUIS**—Plant—W. C. Harting Construction Co., 722 Chestnut St., has contract for rebuilding burned factory, 1618 Tower Grove Ave., for E. H. Baare Manufacturing Co., 1610 Tower Grove Ave.; brick; 68x16 ft. and 50x50 ft.; conc. found and roof; steam heat; Fred R. Nauman, Archt., 4716 Washington Ave.

**ST. LOUIS**—Alterations—Woermann Construction Co., 3800 West Pine Blvd., has contract for installing foundation and erecting 2 rein. conc. floors within pre-walls of cold storage building, 3001 N. Ninth St. for Mound City Ice & Cold Storage Co., 9th and Branch Sts.; O. W. Stiegmeier, Archt.; cost \$33,000.

**ST. LOUIS**—Alterations—J. E. Williams Construction Co., 6635 Delmar Blvd., University City, has contract for alterations to warehouse, 330 S. Newstead Ave. for Philip A. Sullivan, 330 S. Newstead Ave.

**ST. LOUIS**—Factory—Mid-West Screw Products Co., 19 St. George St., acquired and will improve and occupy building 3662 Park Ave.

**ST. LOUIS**—Facilities—Defense Plant Corporation executed contract with Hammer Day Plate and Film Co., St. Louis, for plant facilities, \$450,000.

## NORTH CAROLINA

**SALISBURY**—Building—Southeastern Construction Co., 218 W. Second St., Charlotte, has contract for building for farm equipment for Rowan Equipment Co.; Marvin Helms, Archt., Charlotte.

**WASHINGTON**—Warehouse—Gravelly Tobacco & Peanut Warehouse, H. C. Gravelly, Pres., Bridge St., rebuilding burned warehouse; 100x300 ft.; concrete and wood; conc. floors; comp. roof; cost of building \$25,000, of equipment, \$5,000; Marshall Jones, Archt., East Main St.; James Hill Const. Engr.

## SOUTH CAROLINA

**MANNING**—Plant—Manning Refrigeration & Locker Co., formed by G. T. Floyd and others to establish refrigeration plant.

**SPARTANBURG**—Ice Storage Building—Fiske-Carter Construction Co., 200 Dunbar St., Spartanburg, has contract for construction of \$150,000 addition to ice storage plant of Fruit Growers Express Co., near Southern Railway shops at Haynes on Howard Gap Road; capacity of plant to be increased from 5000 tons to 17,000 tons; foundations laid, initial superstructure started; addition will include 5 compartments, each with a capacity of 2500 tons; wooden construction.

## TENNESSEE

**CHATTANOOGA**—Nylon Yarn Plant—E. I. du Pont de Nemours & Co., Wilmington, Del., considering site near Chattanooga as location of a post-war nylon yarn plant; options have been obtained on tracts of land north side of Tennessee River northeast of Chattanooga; location has been plotted on 2-foot contours; core borings made to determine foundation conditions; proposed plant would be initially comparable in size to company's existing nylon unit at Martinville, Va.

**CHATTANOOGA**—Hatchery—White Oak Chattanooga Hatchery, J. P. Hawkins, Pres., contemplates rebuilding burned hatchery; 1-story; 39x100 ft.; metal roof; \$20,000.

**CLEVELAND**—Chenille Plant—Marvin C. Moore Co., newly formed company, Marvin C. Moore, Pres., establish chenille plant on 31st St.; install machinery.

**MEMPHIS**—Electric—Memphis Light, Gas & Water Division, Major Thomas H. Allen, president, plans construction program at a contemplated cost of \$4,450,000; total outlay planned for the electric department is \$1,750,000, this will include \$105,000 for fifteen capacitors purchased and completion of payment for sub-station on Southern; expenditure of \$300,000 is anticipated for overhead extensions, \$60,000 for underground extensions, \$30,000 for electric feeder lines, \$45,000 for sub-stations additions, \$60,000 for ordinary transformers, meters and services and \$10,000 for a new trolley for the electric repair shop crane;

(Continued on page 70)

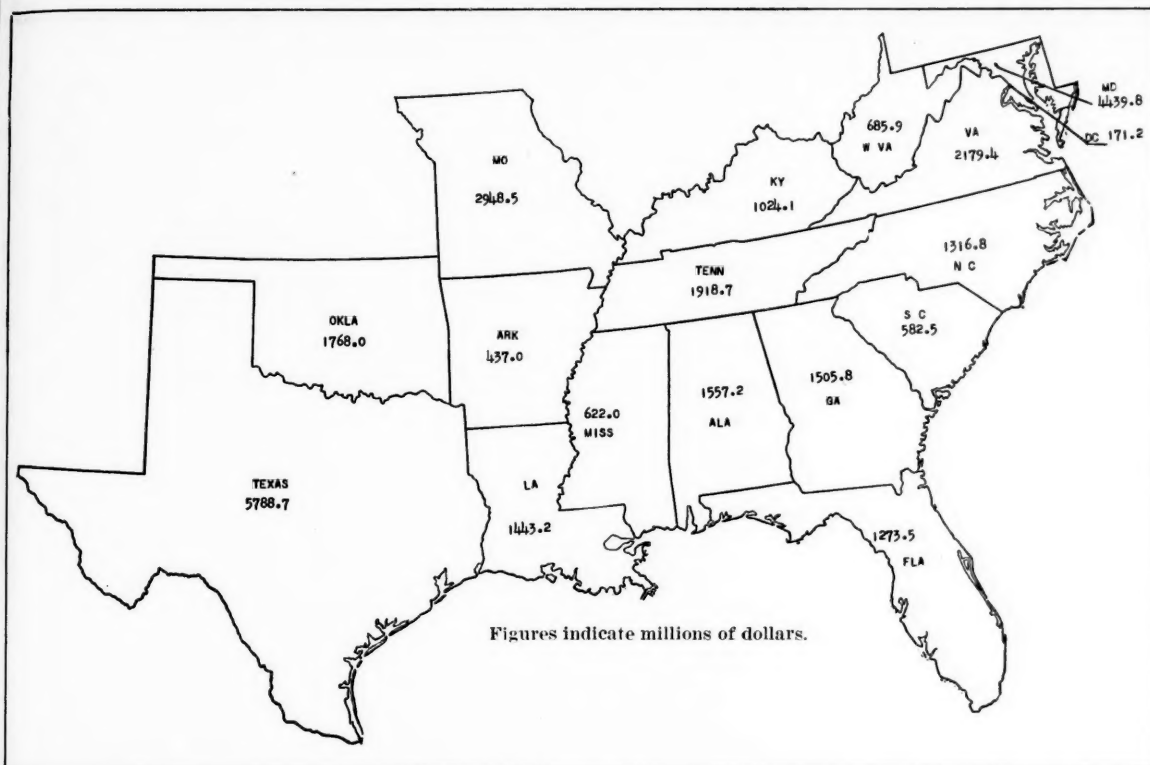
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## South's War Contracts, Allocations, \$29,662,405

Distribution of war supply and facility contracts, as compiled by the War Production Board, shows that the South's share in the \$182,676,368,000 for the entire country is \$29,662,405,000, a gain of \$2,043,363,000 since August 31, 1943. The South's portion is 16.2 per cent of the total. Increases were recorded in the figures for all of the sixteen states except Arkansas, while the District of Columbia shows a marked

drop in Reconstruction Finance Corporation commitments. No explanation is given by W. P. B. for the decline. Texas heads the sixteen southern states. War supply and facility contracts and allotments to the Lone Star State total \$5,788,679,000, while Maryland is second with a total of \$4,439,821,000 with aircraft the largest single item. Of the \$2,087,698,000 contracted and allotted by National Housing Agency the

South received 32.4 per cent, or \$677,600,000. There is no breakdown to indicate how the total is divided as between permanent and temporary housing. Aircraft, Industrial and non-industrial facilities are about evenly divided in the South, both totaling over four billion dollars. The majority of the contracts are assigned on the basis of location of producing plants with availability of raw materials being considered.

Major War Supply and Facility Contracts and Allocations, June, 1940, Through December, 1943  
(Thousands of Dollars)

|                    | Army, Navy and Maritime Commission Supply Contracts |            |            | Facilities |                | Dept. of Commerce C.A.A. | National Housing Agency F.P.H.A. | Federal Works Agency | N.Y.A. Office of Education | Dept. of Commerce R.F.C. | Total       |
|--------------------|---|------------|------------|------------|----------------|--------------------------|----------------------------------|----------------------|----------------------------|--------------------------|-------------|
|                    | Aircraft  | Ships      | Miscell.   | Industrial | Non-Industrial |                          |                                  |                      |                            |                          |             |
| Alabama .....      | 2,803   | 402,302    | 489,202    | 377,504    | 190,832        | 2,214                    | 49,740                           | 22,149               | 12,069                     | 8,363                    | 1,557,178   |
| Arkansas .....     | .....   | .....      | 69,593     | 224,557    | 113,399        | 1,732                    | 16,805                           | 4,698                | 5,650                      | 670                      | 437,059     |
| Dist. of Col. .... | 2,121   | 994        | 11,402     | 20,609     | 60,325         | 150                      | 47,660                           | 16,648               | 2,690                      | 157                      | 171,156     |
| Florida .....      | 2,710   | 499,202    | 85,874     | 59,503     | 522,302        | 13,103                   | 39,057                           | 35,470               | 9,455                      | 6,781                    | 1,273,457   |
| Georgia .....      | 347,489   | 269,217    | 432,497    | 107,182    | 269,124        | 5,198                    | 44,261                           | 15,412               | 10,935                     | 4,532                    | 1,505,847   |
| Kentucky .....     | 206,012   | 122        | 356,974    | 214,717    | 167,791        | 3,439                    | 11,879                           | 12,949               | 9,430                      | 40,823                   | 1,024,136   |
| Louisiana .....    | 131,031   | 423,418    | 266,939    | 331,293    | 248,878        | 2,199                    | 11,739                           | 15,936               | 8,564                      | 3,232                    | 1,443,230   |
| Maryland .....     | 1,818,948   | 525,454    | 1,501,248  | 201,623    | 263,655        | 1,930                    | 85,586                           | 17,666               | 5,961                      | 17,751                   | 4,439,821   |
| Mississippi .....  | 5,981   | 255,604    | 87,085     | 45,806     | 187,718        | 426                      | 18,881                           | 11,630               | 8,462                      | 480                      | 622,073     |
| Missouri .....     | 739,601   | 79,701     | 1,456,651  | 477,434    | 143,159        | 3,267                    | 14,794                           | 17,325               | 9,813                      | 6,783                    | 2,948,528   |
| North Carolina ..  | 21,685  | 329,639    | 496,623    | 46,804     | 356,234        | 4,674                    | 31,077                           | 19,851               | 9,478                      | 730                      | 1,316,795   |
| Oklahoma .....     | 1,084,468   | 2,364      | 180,593    | 212,907    | 254,622        | 3,767                    | 8,383                            | 9,963                | 10,278                     | 677                      | 1,768,022   |
| South Carolina ..  | .....   | 48,974     | 274,049    | 45,276     | 152,661        | 4,351                    | 25,185                           | 26,702               | 5,009                      | 294                      | 582,501     |
| Tennessee .....    | 685,211   | 27,020     | 662,472    | 337,233    | 173,276        | 120                      | 12,393                           | 9,797                | 9,067                      | 2,080                    | 1,918,669   |
| Texas .....        | 1,593,475   | 1,118,862  | 1,160,376  | 895,587    | 834,570        | 10,863                   | 94,620                           | 48,149               | 23,314                     | 8,363                    | 5,788,679   |
| Virginia .....     | 3,032   | 897,439    | 274,173    | 208,367    | 583,008        | 1,511                    | 158,929                          | 42,242               | 8,218                      | 2,462                    | 2,179,381   |
| West Virginia ..   | .....   | 39,385     | 358,807    | 255,541    | 7,433          | 2,090                    | 6,611                            | 5,564                | 10,050                     | 392                      | 685,873     |
| South .....        | 6,644,567   | 4,919,697  | 8,164,557  | 4,070,943  | 4,528,987      | 61,034                   | 677,600                          | 332,151              | 158,298                    | 104,571                  | 29,662,405  |
| U. S. ....         | 47,772,093  | 23,315,321 | 77,532,291 | 15,751,046 | 13,688,985     | 140,243                  | 2,087,698                        | 813,689              | 502,633                    | 1,072,369                | 182,676,368 |

"Aircraft" includes contracts for airframes; airplane engines, propellers, and other parts; and certain related equipment such as parachutes and aircraft pontoons, armaments, instruments, and communication equipment are excluded. "Ships" include contracts for the construction of new vessels of all kinds; the purchase of used ships; and ship conversion, recommissioning, and repair. Propulsion machinery (when separately contracted for), armor, armament, navigation and radio equipment, parts and materials are excluded.

# Industrial News

## U. S. Steel Makes Carloading Record

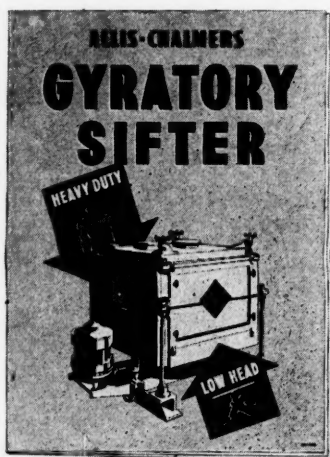
Shipping employees in all United States Steel plants have intensified their efforts to assist the nation's railroads in meeting wartime transportation problems, in a campaign that already has seen freight car loads boosted almost four net tons per car since 1941 through improved loading methods. Through improved loading methods and effective coordination of shipping personnel and facilities, U. S. Steel and subsidiaries have already increased the average tons of products loaded per car from 48,249 in 1941 to 52,028 in 1943. E. G. Ploman, Vice President in Charge of Traffic says the record is a good one, but insists that a better one has to be made to help the carriers over the critical wartime hump.

## Southern Shipbuilding Maritime Awards

Southern shipbuilders continue to the fore according to a recent announcement of awards by the U. S. Maritime Commission. J. A. Jones Construction Co., Inc., Panama City, Fla. has been awarded the Maritime "M" Pennant for outstanding production in the construction of Liberty ships and special types for military service. Gold Star awards have gone to the following shipyards: First Gold Star, St. Johns River Shipbuilding Co., Jacksonville, Fla., and J. A. Jones Construction Co., Brunswick, Ga. Third Gold Star Award has gone to Southeastern Shipbuilding Corp., Savannah, Ga., while Delta Shipbuilding Co., New Orleans and Houston Shipbuilding Corp., Houston, Tex., have been awarded eighth and ninth Gold Stars, respectively.

## Gyratory Sifter Subject of New Allis-Chalmers Bulletin

The Allis-Chalmers heavy duty, low-head gyratory sifter is described in the manufacturer's new bulletin B-6124A. The sifter finds wide application in the flour and cereal milling industries for resifting flour, and is also used to sift light chemicals, food products, hard rubber, wood flour, flaked graphite, ceramic clays and many other materials. Representative wire cloth mesh openings for 4 to 64 mesh are reproduced on one page in the bulletin. Specification tables compare mesh sizes for five kinds of sifting cloth.



Included in the bulletin are perspective drawings of low-head sifter sieves, showing what takes place in a sifter box. What the user of a sifter needs to know about the material to be sifted is listed in ten points.

A section of bulletin B-6124A illustrates ease of removing sieves from the low-head sifter by means of a side-opening door, which permits the sieves to be slid out for inspection and servicing. The bulletin also contains a section which answers many questions pertaining to sifting problems.

Write Allis-Chalmers Manufacturing Co., Milwaukee 1, Wis.

## DuPont Sales Rose Last Year

The largest sales volume in its history and the smallest net income for any year since 1938 except one were disclosed by E. I. du Pont de Nemours & Co. in its 1943 annual report, distributed to \$5,915 stockholders.

Earnings from all sources, including \$20,000,000 in dividends from investment in General Motors Corp., amounted to \$68,706,819. This is equivalent to \$5.50 a share on the common stock, compared with \$5.07 in 1942, \$7.49 in 1941, \$7.15 in 1940 and \$7.66 in 1939. The 1943 earnings from all sources increased nine per cent over the previous year whereas sales to customers increased 17 per cent, and over-all volume of operating activity increased 21 per cent.

Compensation after taxes for all services in construction and operation of government-owned war plants was equivalent to less than one-half of one per cent of the combined construction and operating costs. The net compensation received from all these services during the entire four-year period from 1940 through 1943 amounted to approximately 40 cents a share, an average of about ten cents a share a year on the common stock after deducting applicable administrative costs, taxes, and certain out-of-pocket expenses for which the government does not make reimbursement.

Sales to customers in 1943 were revealed as \$585,481,521. In addition to this, in the operation of government-owned plants the company manufactured war materials having a value of approximately \$231,355,000, products manufactured for affiliated companies and others aggregated approximately \$39,402,000, and inter-departmental billings amounted to approximately \$1,561,000. Thus it may be said that the over-all volume of the company's operating activities for the year amounted to approximately \$917,800,000.

## New Harvester Executive

T. B. Hale has been named vice-president in charge of the newly formed general sales line department of International Harvester Co. Mr. Hale formerly held the position of manager of domestic sales. A. J. Peterson succeeds him in the latter post.

The Harvester organization has set up four new divisions with a general manager over each. New divisions are Farm Tractor, Farm Implement, Industrial Power and Industrial Power Equipment Sales. R. C. Archer, R. P. Messenger, H. T. Reichus and Nell Loynachan, respectively, will be over the new divisions.

## General Cable Eliminates Costly Method of Handling Spools, Reels and Cases

In an advertisement appearing elsewhere in this issue, General Cable Corporation of New York announces that effective March 1 all of its Spools, Reels and Cases will be shipped on a "No Charge" basis, eliminating the present costly and manpower-consuming method of handling containers.

Returnable type containers of the General Cable Corp. may be returned to them, freight collect and credit will be allowed for any billing or charge that has been made.

The corporation arrived at this decision after careful study extending over some years and frankly states the success of this time and money-saving departure will depend to a great extent on the cooperation of those who will be its beneficiaries.

## Coal Stokers for Large Apartments Available

Members of the Stoker Manufacturers Industrial Advisory Committee of W.P.B. have announced that coal stokers of the type required to heat large apartment buildings are available in reasonable supply. At the same time, the members emphasized that they had concentrated more on repairing existing stokers which has increased the demand for repair parts. The manufacturers hoped they would not only be able to meet this demand, but that they also might replace worn out stokers during the current year.



## Trunnion Box and Truck

(Pictured Above)

Palmer-Shille Co., 7122 West Jefferson Ave., Detroit 17, Mich., announce a new style trunnion box, one that is square rather than round in shape. Box is made of 12 gauge steel plate, all welded construction and watertight. Measures 18"x18"x24" high with steel plate reinforcing at trunnion.

The manufacturer has also designed a truck to handle these trunnion boxes. Heavy bar stock, tubular handles, all welded construction; wheels are 10"x2 1/4", roller bearing. Operator pushes trunnion truck to where forked side arms of truck engages trunnion, then pushing down on truck handles picks box up off floor and forms one unit of box and truck for easy wheeling.

## Monsanto Net Sales Up

Net sales of Monsanto Chemical Co., St. Louis, Mo., and its American subsidiary companies for 1943 increased approximately 18 per cent over the previous year and net earnings of \$3.56 per common share were less than those of \$3.75 the previous year, Edgar M. Queeny, chairman of the Monsanto board, disclosed today in his annual report to stockholders.

Net sales in 1943 amounted to \$81,697,069. The increase in the cost of goods sold as related to net sales reflects higher raw material and wage costs and additional amortization of plant facilities erected under certificates of necessity. Special amortization for the year 1943 was \$1,483,913, or 1.8 per cent of sales as compared with \$585,949 or .8 per cent for 1942.

Net income after taxes amounted to \$5,365,775 in 1943, representing 6.6 per cent of sales. Income of \$5,587,738 in 1942 represented 8.1 per cent of sales. The statement excluded a profit of \$1,048,858 from the sale of products manufactured in government-owned plants operated by Monsanto, this profit having been voluntarily returned to the government.

Provision for estimated income taxes of \$10,678,800 was made. The company's total tax bill, federal, state and local, is estimated at \$13,550,721 which is 58.2 per cent of the domestic payroll. The increase in the domestic payroll for 1943 over 1942 is reflected in the fact that the estimated over-all tax bill in 1942 was \$13,249,039 and amounted to 75 per cent of the payroll.

Mr. Queeny reported to stockholders that "It seems desirable to call attention to one statement of important fact obvious itself from the company's reported net income, namely, that Monsanto Chemical Co. is not profiting from this war. On the contrary, 1943 net profit was less than that of 1942, which in turn was less than that of 1941. Earnings are less now than immediately preceding the war, although wartime sales are the greatest in our history. Our operations are making no war millionaires."

## Hercules Powder to Make New Insecticide

Hercules Powder Company of Wilmington Del., has announced the conversion of equipment previously used for the manufacture of military explosives into a unit for the production of DDT, new powerful insecticide. The conversion is at the government's request and the entire output will be turned over to the armed forces. The new insecticide, an effective weapon against body lice, carriers of typhus fever, is so powerful that a single application to clothing provides louse protection for a month.

The firm New Orleans and Haus shop support, the 33 years' president treasurer beginning

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## New Name, Old Firm

The firm name of Oliver H. Van Horn Co., New Orleans has been changed to Stauss and Haas, Inc. Dealers in machine tools, shop supplies, paints and welding equipment, they have been operating for over 38 years with both Edward F. Stauss, Sr., president and Edgar J. Haas, secretary-treasurer active in the firm almost since its beginning.

## No Relaxation of Lumber Restrictions

War Production Board has announced that the tightness of the lumber situation precludes the possibility of relaxing present restrictions on construction for civilian purposes. Armed forces will need 70 percent of the estimated total lumber requirements for 1944, set at 34 billion board feet. It is expected that shipping lumber (boxing and crating) will demand over 15 billion board feet, the remainder of 1944 production being required for construction for the Armed Forces, for railroads, utilities, mining and heavy industries, farms, war housing and other essential civilian requirements. Estimated lumber production for 1944 is substantially below anticipated requirements, and stockpiles are dangerously low, says WPB.

## New Rayon Fiber

American Viscose Corporation has announced successful development into commercial application a new very fine viscose rayon staple fibre of the extra strength type. The new fiber, to all practical purposes as fine as silk, will be of interest to fine goods cotton system mills and the spun silk or schappe spinners.

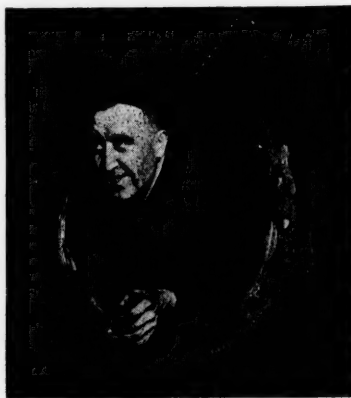
## Electrical Output Up 33.5%

Preliminary reports by the Federal Power Commission indicate production of electrical energy in 1943 reached the all-time high of 220,776,000 kilowatt hours, an increase of 16.7 percent over the 1942 total of 189,181,000,000. Water power production was 33.5 percent of the 1943 output.

## Hammerle New S.P.A. Forester

William C. Hammerle, for several years state forester of South Carolina has been appointed forester of the Southern Pine Association. He succeeds Brooks Toler, resigned.

**Below — A large section of flexible hose built by B. F. Goodrich Co., of Akron, Ohio, is being inspected by John Curtis, veteran hose builder. Made of 14 plies of heavy duck fabric coated with synthetic rubber and reinforced by two coils of heavy wire, this hose weighs 2,200 pounds and is 15 feet long. It will be used for hydraulically mining phosphate from which phosphorous, fertilizer and medicine are made.**



## Diesel Engine Manufacturers Association to New Quarters

Harvey T. Hill, recently appointed executive director of the Diesel Engine Manufacturers Association, has announced that February 13 the headquarters of the association were moved to 1 N. La Salle St., Chicago.

Officers of the association are: President, Robt. E. Friend, president of the Nordberg Manufacturing Co., Milwaukee; vice president, Gordon Lefebvre, president of Cooper-Bessemer Corp., Mt. Vernon, Ohio; and treasurer, Robt. H. Morse, Jr., general sales manager of Fairbanks Morse & Co., Chicago.

## Bruce of Memphis Again Heads Southern Hardwood Producers

Arthur Bruce of Memphis, Tenn., was re-elected president of the Southern Hardwood Producers, Inc., in an executive meeting held recently in New Orleans. At the same time J. W. Bailey of Laurel, Miss., was re-elected vice president. Calvin E. Miller, assistant secretary and statistician, was named secretary-treasurer and general manager to serve temporarily in the post of Ed R. Linn, resigned.

At the meeting the organization appropriated \$15,000 for a general research program, and at the same time voted \$1,000 a year for three years to the American Forestry Association to aid in a timber survey.

Meeting jointly with the Southern Hardwood Industry War Committee for a discussion of postwar matters, Mr. Bruce warned both organizations the hardwood industry may expect keen competition from light metals and plastics after the war.

## Memphians Elected by National Lumber Exporters Assn.

J. S. Williford, Joe Thompson and Douglas F. Heuer, all of Memphis, were recently elected to the offices of second vice president, treasurer and secretary, respectively, of the National Lumber Exporters Association.

## New Light Duty Toggle Clamp

A recent addition to the De-Sta-Co line is a small, light duty toggle clamp with a T-shaped handle, which has been found to increase efficiency of operation in spots where limitation of overhead space prohibits the use of the larger or taller clamps. In those places the T-handle provides a firm grip which would be impossible to secure with a shortened straight handle of the standard type.

The new clamp is available with either the straight solid work bar, De-Sta-Co Model No. 207-TS, or the now widely used U bar, Model 207-TU. In this latter model the retaining bolt can be set at any desired distance from the handle, thereby making the clamp adaptable to varied job requirements.

Dimensions are 3-7/8" from end of work bar to end of base and 4" high overall when in locked position as illustrated.

Full information will be sent on request, by Detroit Stamping Company, 381 Midland Ave., Detroit 3, Michigan.

## New Type Fluorescent Lamp

A new exposed type fluorescent luminaire called Lightronics which conforms with W. P. B. weight limitations has been developed by Edwin F. Guth Co., 2615 Washington Ave., St. Louis, Mo. Lightronics are available for immediate shipment.

## Beaumont Shipyard Gets Maritime Contract

Pennsylvania Shipyards, Inc., of Beaumont, Tex., has been awarded a contract by the Maritime Commission to construct 18 cargo vessels of the CI-M-AV1 type, a ship of about 5,000 dead-weight tons.

## New Standard Oil Subsidiary

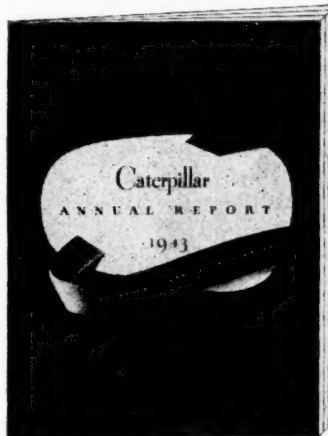
Standard Oil Co. (N. J.) and Socony-Vacuum Oil Co. have organized a new company, Intava, Inc., with headquarters in New York City, to extend to foreign lands complete aviation service, arranging to supply air lines operators a full line of aviation petroleum products under the Intava brand. The new company will market its products in all foreign countries except those in which oil is a government-controlled monopoly.

## Caterpillar Sales Higher in 1943 Annual Report Reveals

Sales of the Caterpillar Tractor Co., Peoria, Ill., manufacturer of tractors, motor graders and Diesel engines, last year reached the highest level in the company's history with a dollar value of \$173,945,023, or 22.4 per cent more than the preceding year and 70.6 per cent above sales in 1941, although the ratio of profit to sales fell to 4.7 per cent, mostly due to federal income taxes.

Profit per share of common stock for 1943, as shown by the annual report mailed last month to stockholders and employees, was \$4.35, against the \$3.72 for 1942, an increase of sixty-three cents. Dividends paid to stockholders amounted to \$2.00 per share, and totaled \$3,764,480 and were at the same rate as for preceding years beginning with 1938. Earnings for 1943 are subject to renegotiation under provisions of the 1942 revenue act, but no appreciable effect is anticipated.

Importance of heavy construction machinery in the current global war was emphasized. The report pointed out that the Caterpillar Tractor Co. has undertaken an expanded tractor production program at the urgent request of the War Department, and that this expansion has resulted in a "victory termination" credit agreement with



thirteen of the company's depository banks under which \$25,000,000 may be borrowed up to November 15, 1946. The proceeds will be used to provide or replenish working capital for war production, including canceled contracts, and for paying of federal income and excess profits taxes.

## New Basket For Strainers

Increased straining area and rugged construction are outstanding features of the Blackmer Pump Company's new strainer baskets just announced by J. B. Trotman, General Sales Manager of the Grand Rapids, Michigan concern.

The new baskets are constructed from heavy-gauge perforated sheet instead of the usual wire mesh and are available with various size openings. These new strainer baskets are designed to withstand far greater abuse than the old wire mesh screen which were frequently damaged during cleaning.

Sun Oil Co., Philadelphia, has published a little book entitled "What Makes a Grease." Factors involved in the selection of grease, says the booklet, are temperature, speed, and load. Temperature includes the atmospheric temperature in the plant and the operating temperature of the bearings. A heavy grease may place too much of a drag on a bearing operating at high speeds; too light a grease may be "thrown" out of the bearing.



# Control or Competition

by

**Jack Williams**

*Publisher, The Journal-Herald,  
Waycross, Georgia*

**T**HE doctrine of scarcity is a doctrine that the law of supply and demand should be controlled so as to keep the supply lower than the demand.

It started with the idea of business men that if they could keep the supply lower than the demand they could obtain higher prices and higher profits.

So we had "corners" in which the effort was not only to force the supply lower than the demand but to get control of all the supply, so then an arbitrarily high price could be fixed. We had corners on wheat, corners on corn and the like.

Next came agreements not to manufacture but so much of any product; each plant in the agreement being allowed a certain manufacturing quota. Thus even though the demand was for more than was being manufactured, by keeping the supply lower than the demand, manufacturers were able to keep prices up and profits up.

Out of all this came the Anti-Trust legislation purposed to keep business men from setting up a monopoly by agreement or combine; and from stifling free competition.

Then the federal government decided to follow in the footsteps of the business men who thought supply should be kept lower than demand in so far as agriculture was concerned.

The federal government paid farmers to plant less of certain crops; to reduce the number of livestock; even if crops already in existence had to be ploughed up and livestock already in existence had to be killed.

The purpose back of this was identically the purpose the business men showed, still the business men promptly raised a protest when this business principle that they themselves followed was applied to agriculture.

Then union labor decided to apply the same principle. Workers were asked to do less in a day than they could do so that it would take more men to do the same amount of work and thus provide jobs for more men; requests were made for

shorter hours to the end that it would take more men to do a given amount of work in a given length of time.

All of these things sought by union labor were in accordance with the business principle that the law of supply and demand should be controlled so as to work to the profit of a certain group, rather than left free.

It was the purpose of union labor to keep the demand for workers greater than the supply of available workers.

All of this reasoning left out of consideration factors that could not be controlled by those who controlled the law of supply and demand.

Man could not control rain and sunshine, accidents and sicknesses and deaths.

After the law of supply and demand had been influenced and con-

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## New Waterway Proposal to Shorten River Hauls to Gulf

The proposed Tennessee-Tombigbee inland waterway improvement would greatly decrease waterways mileage between the Tennessee, Ohio and upper Mississippi valleys to the Gulf, and give those areas all-water connection with the inland waterways at Mobile instead of New Orleans, say experts. Estimated to cost \$66,000,000, the proposal is to connect the Tennessee and Tombigbee rivers by a 39-mile canal, and making certain improvements to the Tombigbee channel.

Construction of the canal and deepening the channel would transfer water traffic from one watershed to another with ease, decreasing hauls from the valleys mentioned by from 108 to 630 miles, routing a large portion of river traffic from those sections through Mobile, instead of through New Orleans as is now done.

Col. P. A. Feringa of the Board of Army Engineers for rivers and harbors recently appeared before a Congressional committee to present a detailed analysis of the project, and from his presentation there can be little question of the economy of the proposal, say shipping experts.

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trolled to suit the pocketbooks of a few, nature or God or fate or uncontrolled events came along and upset the balance that was man-made.

In opposition to the doctrine of scarcity is the doctrine of abundance.

According to the doctrine of abundance every industrial plant would operate to full capacity; every farm would produce all it could produce; neither in business nor in agriculture would there be any effort at any time to curtail production.

Both industry and agriculture would produce as much as was humanly possible.

It is claimed by those who support the doctrine of abundance that it is impossible for the world to produce more than the world can consume; that the world will buy all the manufactured products manufactured and the world will eat all the food and livestock produced.

It is argued that a doctrine of abundance might result in lower prices and lower profits but due to the great increase in trade the average business man or the average farmer (or the average workman) would be better off than under the doctrine of scarcity.

Doctors do not want too many doctors in a community; lawyers do not want too many lawyers in a community; newspaper men do not want too many newspapers in a community; organized labor does not want too many workers in a community; farmers do not want too many farmers in a county; industrial owners do not want too many industrial plants in a section. All of this is belief in the doctrine of scarcity.

The law of supply and demand has been tampered with many times recorded by history. Its fundamental working can be illustrated by Robinson Crusoe. Gold would have been a burden to him.

Do you prefer the doctrine of scarcity or the doctrine of abundance? Which would you rather have, money or the things it will buy?

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# Congress Reasserts Itself

## Views of Southern Editors

### Follow the Precedent

The country still rings with expressions of admiration for the courageous speech in which Majority Leader Alben Barkley, of Kentucky, definitely broke with Roosevelt.

He has been poorly recompensed by his master for his years of servility. . . .

We are wondering how much this lesson will be borne in upon other members of the House and Senate who have supported the President when they knew he was violating the constitution of the United States and for the sake of a life tenure in office was flattering the despicable CIO which is pledged to the overthrow of the American form of government.

—Macon (Ga.) Telegraph

### Reassertion of Congress

It is refreshing and encouraging to see the Congress reasserting itself as it did when the House so emphatically over-rode the President's veto of the tax bill.

The clear-cut issue involved is that the laying of tax levies is a constitutional, congressional function.

The presidential rebuke to the Congress, contained in his veto message, was unwarranted and speciously reasoned, and, in effect, showed almost contempt for the legislative processes.

President Roosevelt keeps reiterating that there is a war to win, but at the same time he kicks the men who provide the wherewithal for winning the war in the teeth and expects them to "take it" smiling.

—Memphis (Tenn.) Commercial Appeal

### Political Sins Come Home To Roost

All of the gall and wormwood that has piled up in the mind and heart of Senator Alben Barkley during seven years of subservience to a master political legerdemainist spewed forth when the Democratic leader in the Senate resigned his post in protest of President Roosevelt's tax bill veto message. . . . Few times in the history of the United States has the historic Senate chamber resounded to such a scathing indictment of a Chief Executive by a bell-wether of his own party, and few times has such an indictment been made by any man more familiar with the weak points of the target of his attack. . . . It is certain that a telling body blow has been administered to the Fourth Term manipulators and the New Deal element.

—Selma (Ala.) Times Journal

### Back Where It Belongs

One of the first prospective fruits of the congressional flare-up is a return to Congress of the real as well as the theoretic responsibility for originating tax legislation.

Of late years, Congress has been the tax-making body in name only. While tax legislation continued to take the usual course of procedure from the House Ways and Means Committee, the real work was done in the Executive Department. Tax authorities of the Treasury not only have advised the Congress, but they virtually have taken over the tax framing function.

—The Wheeling (W. Va.) Intelligencer

### Dramatic, Sensational— and Fundamental

Senator Barkley yesterday trod the heights of drama and sensation. . . . He exploded a political bombshell of the highest content and he not only expanded the cleavage in the Democratic party into a great gulf but he furiously indicted the president of the United States for a "deliberate and calculated assault upon the honesty and integrity" of Congress. His was the expression of the most formidable political and parliamentary rebellion of modern times.

The president has repudiated his own party and his own leaders in Congress, and no amount of sophistry or slickness can overcome that grim state of facts.

—Tulsa (Okla.) World

### Depends Upon The President

Better relations between the President and his party representatives in Congress are being forecast as a result of the bitter feud that came to its dramatic explosion in the Senate recently.

The President has already indicated a spirit of repentance for having written a veto message containing clear insinuations against the honesty and integrity of the Congress, including such unwarranted assertions as that the bill which he disapproved had been designed to give relief to the greedy instead of the needy.

That phrase, by the way, must have been whispered in the President's ear by one of his pip-squeaks who hang around the White House under the guise of holding offices as Presidential assistants or, more accurately, political errand runners.

—The Charlotte (N. C.) Observer

### Southern Democrats Urged To Unite Against A Fourth Term Nomination

Reaction to the stunning blow suffered by President Roosevelt as a result of his finally having driven Congress into open rebellion against continued unreasonable attempts to keep it under the heel of the White House ranges all the way from forecasts of wide repercussions in the Democratic party to outright appeal to the Southern states to unite behind an outstanding anti-New Dealer for the 1944 Democratic nomination in preference to falling in with the fourth-term movement. . . .

The Savannah (Ga.) Morning News declared "Democrats in general, not only in the South but in other sections, do not favor a fourth term for Mr. Roosevelt or any other man, but many have been led to believe that no other Democrat could win next November and to many dyed-in-the-wool Democrats of the South the idea of voting for a Republican is thoroughly repugnant. Therefore, the logical course for the Democrats of all the Southern states to pursue is to concentrate upon an outstanding antifourth-term and anti-New Dealer and stand by him from start to finish."

—The Mobile (Ala.) Register

### A Bad Time for the President

It is an accepted fact that President Roosevelt has held Congress under his thumb since the present war was declared December 8, 1941. Since that definite date he has assumed powers that do not belong to his office. Quite recently he attempted to justify his Federal ballot scheme on the theory that he is Commander-in-Chief of the Army and Navy—which is very poor reasoning, inasmuch as it disregards the clear authority over elections that rest within the States.

But, Senate Majority Leader Alben W. Barkley stunned the Senate and the country when he charged Mr. Roosevelt with attempting to "belittle and discredit Congress" in his tax message.

Even more important is the first proof of the long-boasted intent of Congress to declare its "independence."

—Elizabethton (Tenn.) Daily Star

### Revolt Against Roosevelt

Senator Barkley's action is certain to have national political reverberations. It could not be otherwise when a man who has carried the personal Roosevelt banner for 12 years suddenly hurls it from himself with such startling vehemence and just at the moment that the presidential New Deal clique is straining its lungs in an effort to whip up a fourth term breeze. It may be that Senator Barkley sees an anti-Roosevelt gale forming behind the fourth term zephyr and has no intention of trying to ride it out in his own candidacy for re-election in Kentucky this year. But, the Kentucky senator's move cannot be set down as simply personal political expediency. He has stuck to Roosevelt in too many personally distasteful political jams in the past 12 years for that to be the case. The manner in which Senator Barkley acted, the issues he raised, the ill motives he attributed to Roosevelt in person and the personal denunciation in his own statements do not paint a picture of a man merely mending a political fence on election eve. They indicate a man who finally has had more than he can swallow and conceals neither the regurgitation nor his dislike for its taste.

—Shreveport (La.) Times

# Southern Industry Active

## DPC Steel Investment Totals \$74,355,000 in South

**S**TEEL making facilities financed and owned in the South by the Defense Plant Corporation involved expenditure of \$74,355,000, it is announced by W. C. Costello, special assistant to the board of directors of the Reconstruction Finance Corporation. The plants are located in four states and operated by five companies. Locations, operators and cost of the various projects are:

Houston, Tex.—American Rolling Mill Co., \$28,300,000;  
Newport, Ky.—Andrews Steel Defense Corp., \$5,348,000;  
Daingerfield, Texas — Lone Star Steel Corp., \$21,469,000;  
Birmingham, Ala.—Republic Steel Corp., \$990,000;  
Birmingham, Ala.—Republic Steel Corp., \$2,412,000;  
Gadsden, Ala.—Republic Steel Corp., \$12-171,000;  
Elkhorn, Ky.—Republic Steel Corp., \$1-104,000;  
Chattanooga, Tenn.—Tennessee Products Corp., \$1,816,000;  
Rockwood, Tenn.—Tennessee Products Corp., \$725,000.

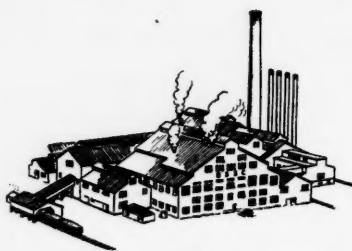
## Baltimore Ship Yard Launches Vessel, Red Cross Drive

**B**ETHLEHEM-Fairfield Shipyard, Inc., Baltimore's mass Liberty ship producer, on March 6 launched its 305th Liberty ship and at the same time opened a drive for contributions to the American Red Cross. The vessel was named for Robert Ellis Lewis, a Red Cross worker killed in the line of duty in an airplane crash at Port Moresby, New Guinea. Mrs. Robert L. Lewis, mother of the man for whom the ship was named, was the sponsor in the christening ceremony.

The Bethlehem-Fairfield yard is the largest on the east coast for building Liberty ships. To its output of 305 such vessels have been added 30 tank landing ships for the Navy. Plans are now under way to convert the yard's many ways over to construction of Victory ships, a slightly larger and considerably faster design than the Liberty ship. The Victory ships will be propelled by turbine engines, as contrasted with reciprocating engines used in the Liberty ships.

## New Spinning Mill Soon To Reach Full Capacity

**A**ERICAN Thread Co., Inc., is finishing its plant at Tallapoosa, Ga. J. F. Plexico, superintendent at that point says the project is 90 per cent complete. The structure is a modern two-story brick building with storeroom and shop in the basement. Modern in every detail, the structure will house 16,000 yarn spindles and 9,600 twister spindles for the process of making combed yarn ply thread. There are three brick warehouses to the west of the main building.



## \$1,725,000 Improvement Work Proposed By Maryland Utility

**T**HE Board of Directors of the Eastern Shore Public Service Co., Salisbury utility serving approximately 29 communities on the eastern shore of Maryland, have approved enlargement of generating, transmission and distribution facilities at a cost of \$1,725,000, according to an announcement by Lewis Payne, president of the company. A 7,500-kilowatt turbo-generator will be added at Vienna, where the present capacity is 19,000 kilowatts. Additional transmission distribution lines are to be constructed and others rebuilt and improved. Automatic high voltage oil switches are to be installed at Cambridge, one of the larger towns served by the company's lines. Engineering on the improvements is well under way and construction is to start as soon as possible.

## Construction Proceeds on \$2,650,000 Alumina Unit

**C**ONSTRUCTION is being pushed by Daniel Construction Co., of Greenville, S. C., on a \$2,650,000 alumina plant at Harleyville, S. C., for Ancor Corporation, holder of the contract with the Defense Plant Corporation to act as agent for the project and to operate it upon completion.

Fifty tons of alumina, the powdery substance from which metallic aluminum is made, will be produced daily when the plant is finished this summer. Although often referred to as a pilot plant, the project will contain full scale equipment. Design is such that greater capacity will be possible by adding additional units.

C. F. Jackson, consulting engineer for the Ancor Corporation organized by Volunteer Portland Cement Co. and American Nephtheline Co. to carry out the plans and operate the new plant, states that the plant will employ a process developed over a period of six years by associates of his corporation.

High alumina clay and limestone will be used in the process, which is called the soda-lime method. The clay will be obtained from the Four Holes swamp area of Dorchester County. Three tons, together with five tons of limestone, will be needed to produce one ton of alumina. This will be sent to Alcoa, Tenn., and other aluminum producing centers for reduction to metallic form.

## Big DuPont Nylon Plant Planned for Tennessee

**P**OSTWAR plans of E. I. du Pont de Nemours & Co., Wilmington, Del., include a large nylon yarn plant near Chattanooga, Tenn., according to an announcement by E. K. Gladding, manager of the company's Nylon division. "Options have been obtained on tracts of land on the north side of the Tennessee River northeast of Chattanooga," Mr. Gladding said, "so that engineering surveys of the ground could be made." Core borings have been finished and contour surveys plotted.

Mr. Gladding stated that the Du Pont Company is planning to launch its long range program for increasing nylon yarn production as soon as general conditions permit. The proposed new plant is part of the plan. Site investigations are now being carried forward to eliminate loss of time when conditions reach a point where construction can proceed. The plant will compare in size with the company's existing nylon unit at Martinsville, Va., and will employ 1,000 workers upon completion.

## \$8,000,000 Bayou Pipeline Completes First Year of Service Above Average

**T**HE \$8,000,000 Bayou pipeline system extending from Houston and Texas City, Texas, to Baton Rouge, La., and built of salvaged materials has completed a year of service with a delivery average of 57,000 barrels of gasoline and kerosene, or 7,000 barrels better than the peacetime figure of 50,000 barrels.

Announcement of the anniversary was made by H. H. Anderson, vice president of the Shell Pipe Line Corp., the organization selected to design, construct and operate the Bayou route by the six major oil companies who financed the work. All of the line's 300 miles of pipe was resurrected from obsolete equipment, he pointed out, and the pumps and motors for the booster stations were obtained second-hand.

"In most cases," Mr. Anderson said, "it was necessary to shape construction plans to fit available reconconditioned equipment, rather than simply planning the line to the requirements of the job. The Bayou line, as its name implies, runs through low, swampy land along the Gulf Coast with a maximum elevation of 61 feet, so all of the pipe had to be thoroughly coated against rust before it was serviceable for the job."

The Bayou pipeline was originally projected in 1942 to feed the Plantation Pipe Line running from Baton Rouge to Richmond, Va. Replacing tankers and barges in feeding the Baton Rouge terminals of that line, the Bayou project made it possible to move a continuous stream of oil products from Texas City to Richmond, a distance of 1,262 miles.

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FOR

## The Course of Empire is *South*

**SOUTH** For years the South was cursed with the inhuman and uneconomic institution of slavery.

For years the South was desolated by war and carpetbaggers.

For years the South was penalized by having to sell on a free market and buy on a protected market.

Even today too much and too many of the products bought and used in the South come from other sections.

Even today too many of the South's best young students go elsewhere for opportunity.

But the South is now developing its great inherent strength and character again.

Now is the time for the South, from its own resources, to improve farming, dairying, and livestock raising—to promote worthwhile home-owned and home-controlled industries—to improve educational facilities and training for all citizens—to promote better health and better living conditions for all—to preach and practice hard work, thrift, independence, and self-respect—to make Honor and Liberty and Love of America its greatest desiderata.

Truly the course of Empire is pointing toward the South; but it will move South only when southern people display the intelligence, the courage, the fairness, and the energy to justify such movement.

Freight rates are an important factor. Business, in general, seems pleased with the existing southern rate structure. The South's railroads have tried, are trying, and will try, to do everything consistent with law, fair play, and sound economics to promote legitimate business, industry, and agriculture in this great section.

This ninety-eight year old railroad asks nothing better than to cooperate with free men and women, under a government of law, to make the South both "The Land of the Free" and "The Land of Opportunity".

THE NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY





## Synthetic Rubber Plants Slated for \$30,000,000 Improvements

**E**XPENDITURE of \$30,000,000 for improvements to the country's synthetic rubber plants has been announced by Bradley Dewey, rubber director. Plants making butadiene from alcohol will receive \$3,000,000, while \$10,000,000 will be distributed among those making synthetic rubber's main ingredient from petroleum. Styrene plants are to receive \$3,000,000 and copolymer plants, \$10,000,000.

Two of the country's butadiene from alcohol plants are located in the South in West Virginia and Kentucky. The balance of southern synthetic rubber production is concentrated in Texas and Louisiana. The largest proportion of production is also in that area. Original construction has been substantially completed.

Butadiene is a hydro-carbon compound which forms about three-fourths of the raw material used to produce synthetic rubber of the general-purpose or Buna-S type. Styrene makes up about one-fourth of the raw materials used in Buna S. Copolymer plants are the units where the two ingredients are combined to make the Buna S. Butyl is a specialized synthetic rubber produced from petroleum and tree resins. Improvement of butyl facilities will cost \$3,000,000 under the program.

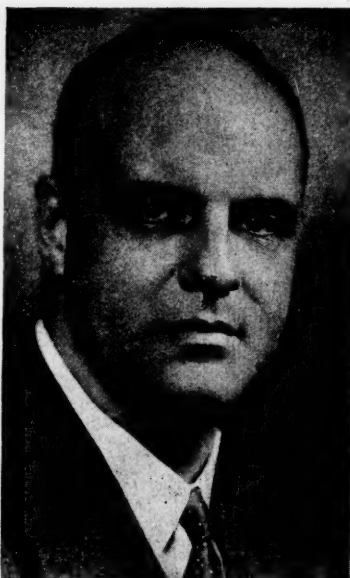
All of the major rubber companies are participating in the synthetic rubber output, including Goodrich, Goodyear, Firestone and United States Rubber companies, as well as Standard, Sinclair, Shell and Eastern States oil companies. Estimates place new supplies of synthetic rubber to be available this year at 818,000 tons. To this will be added 81,000 tons of natural crude and 205,000 tons included in the inventory at the beginning of the year. Requirements are expected to reach 953,000 tons.

## Pig Iron and Chemical Plant Authorized for East Texas

**A** \$2,500,000 pig iron and chemical plant will be established at Rusk, Texas, as the result of a contract authorized between the Defense Plant Corporation and McCrossin Engineering Co., of New York, it has been announced by Jesse H. Jones, secretary of commerce.

Culminating several years of negotiation, the project will involve dismantling and reassembling two blast furnaces, a chemical wood unit from other sections of the country. One of the furnaces and the chemical plant will be moved from Wells, Mich.; the second furnace, from Pembroke, Fla.

Hardwood will be used to produce acetic acid, methanol, wood tars and charcoal in the chemical unit. The charcoal will be used in the blast furnace operations. Ore for the furnace operations will be obtained from thousands of acres of iron ore deposits in the Cherokee county area.



Julian M. Foster

## Georgia International Corporation Organized by Georgia Hardwood Lumber Co.

**E**LSEWHERE in this issue appears a full-page advertisement of the Georgia International Corporation, with offices at 20 Exchange Place, New York City.

The new corporation is a wholly-owned subsidiary of the Georgia Hardwood Lumber Company, with general offices at Augusta, Ga., largest firm of exporters of Southern lumber and forest products in the United States.

Two internationally known figures are key executives. First Vice President is Julian M. Foster, formerly president of the Coca Cola Company of Brazil and for many years an executive of the Coca Cola Export Corporation, M. H. Prang, vice president, was formerly export executive of Goodyear Tire and Rubber Company, and vice president of Block International Company of New York.

The Georgia International Corporation has established very close relations with various companies manufacturing building materials of all kinds, steel products, paper and pulp, textiles, machinery and various other lines. All of these products will be marketed and distributed by Georgia International Corporation to all the foreign markets of the world.

The parent company, Georgia Hardwood Lumber Company, maintains branch offices and representatives in thirty-six countries; its same widespread sales organization will represent Georgia International Corporation in foreign fields.

## Work Starts on \$2,000,000 San Antonio Power Unit

**W**ORK has started on the \$2,000,000 20,000-kilowatt turbo-generator and high pressure boiler installation for the City Public Service Board of San Antonio, Texas, it is announced by Gibbs & Hill, Inc., New York firm engaged to do the engineering work, supervise construction.

## L. & N. Spur Track to Open Big Kentucky Coal Field

**A** \$3,000,000 coal mining operation is contemplated in Perry County, Kentucky, by Blue Diamond Coal Co., Inc., it is revealed by Alexander Bonnyman, president of the company which has offices in Knoxville, Atlanta, Cincinnati and Minneapolis.

The deposit is located in country now accessible only by foot at the head of Clover Fork off Leatherwood and is being opened up by ten and one-half miles of spur track being constructed at a cost of \$2,000,000 by the Louisville & Nashville Railroad.

Seventeen miles south of Hazard, the project will include a 100-car per day tippie to serve the mine and almost four miles of load, empty, tippie and industrial track, in addition to the Louisville & Nashville trackage.

An entire village will be built. Mr. Bonnyman emphasizes that the new living quarters will be designed to the highest standards and will include schools, churches, bathing facilities, stores, and shops. The village will have accommodations for 5,000 people.

There are more than 50,000,000 tons of coal available at the site, says Mr. Bonnyman, and it is his opinion that there will be no better mine, based on getting out 5,000 tons of coal daily in seven hours in the states where his company operates. The mine will be a drift-mouth type.

The Blue Diamond project will be just a part of coal lands with deposits totaling about 200,000,000 tons being opened by the new spur track. Mr. Bonnyman points out that the new field will be the biggest opened on the Louisville & Nashville since extension into the Hazard area thirty years ago.

Three years will be required for completion of the project, but first coal will be produced in shortly over twelve months. The Louisville & Nashville spur track is expected to be finished in September.

## New Oklahoma Octane Plant to Cost \$14,000,000

**T**HE new plant of Associated Refineries, Inc., at Beckett, Okla., will cost \$14,000,000 and will embrace the latest designs in catalytic cracking, alkylation and isomerization. Designed by Associated engineers in collaboration with Universal Oil Products Co., Chicago, and Frick-Reid Supply Corp., Tulsa, the plant is being constructed by the latter.

Associated Refineries is a new corporation organized under the laws of Delaware to build and operate a 100 octane refinery under contract with Defense Plant and Defense Supplies corporations. Officers are L. B. Simmons, chairman of the board; M. L. Freese, president; R. B. Anderson, B. I. Lubell and R. C. Stanford, vice presidents; H. B. Alsbaugh, secretary and treasurer, and C. D. Cund, assistant secretary and treasurer.

W. D. Manz is general superintendent.



## SHE HAS THE VOICE WITH A SMILE, TOO

*She's your personal representative at the telephone  
company—the girl in the Business Office*

ANY TIME you'd like to know anything about service, or equipment, or bills, or war-time telephone regulations, she's there to help.

Sometimes, because of the war, she cannot give you the exact type of equipment or service you want—or just when you want it.

But you can be sure of this:

She will do her very best at all times and do it promptly, efficiently and courteously.

BELL TELEPHONE SYSTEM



When you are calling over war-busy Long Distance wires, the operator may ask you to "please limit your call to 5 minutes." That's to help more calls get through during rush periods.



MARCH NINETEEN FORTY-FOUR

## Lukens Steel Appoints O'Leary To Sales Post

Arthur J. O'Leary has been appointed Assistant Manager of Sales of Lukens Steel Co., Coatesville, Pa. Mr. O'Leary joined Lukens as a shipping clerk in 1926.

## Haight to Represent Baker Raulang

Henry S. Haight, operating as Haight Engineering Co., Richmond, Va., has been appointed North Carolina representative for the Baker Industrial Truck Division of the Baker-Raulang Co., Cleveland, Ohio.

## Atlantan to O.P.A. Advisory Post on Gray Castings

F. H. Rayfield, vice president of Potter & Rayfield, Inc., of Atlanta, Ga., was recently appointed to OPA's Industry Advisory Committee for Gray Iron Castings.

## Aluminum Production Up 75%

Primary aluminum production for 1943 has exceeded 1942 production by over 75 per cent to reach an all-time high of over 1,800,000,000 pounds. Aluminum from secondary sources was over half-billion pounds. These figures do not include importations of 428,700,000 pounds from Canada.

## "Big Inch" Anniversary

In its first year of operation, ended Feb. 18, the "Big Inch" pipe-line—the world's largest—delivered more than 88 million barrels of crude oil from Texas to the East Coast. Although constructed for a daily capacity of 300,000 barrels, the line has actually exceeded that figure on many occasions.

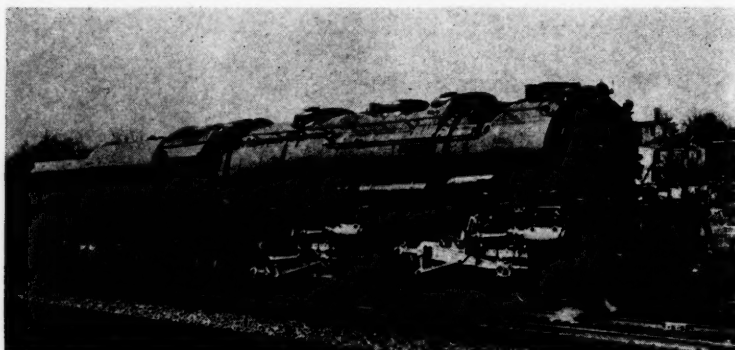
## Affleck, Father of Concrete Roads, Passes

Benjamin Franklin Affleck, who rose from an obscure office position to president of the Universal Atlas Cement Company, U. S. Steel Corporation subsidiary, from which he retired in 1936, died suddenly of a heart attack, Feb. 13, at the family home in Winnetka, Ill. He would have been 75 on March 1.

Mr. Affleck was one of the first to realize the value of concrete for roads and streets and was one of its most persistent advocates. Much of the work of Universal Atlas, of the Portland Cement Association, which he served as president for five years, and of the cement industry for good roads was due to his faith and leadership. By many he is considered the "father of concrete roads."

## New Mallets for B. & O.

The first of 20 new Mallet locomotives being built for the Baltimore and Ohio Railroad by the Baldwin Locomotive works was recently delivered and immediately placed in service. This is the largest steam locomotive ever operated by the B. and O. and will be used for hauling heavy coal trains from the West Virginia fields to the East. It is powerful enough to haul, unaided, 1600 tons in one train and over the Allegheny mountains. B. and O. pioneered the Mallet type, bringing into service the first ever designed and built. (below)



## Texas Tin Smelter

(Continued from page 44)

The country's normal needs for canning have amounted to 38,000 tons of tin a year. By conservation and substitution this demand has been reduced, but large quantities are still required for military and other essential food packing. Dettinning operations such as the new plant at Birmingham, Ala., have been established to recover the greatest possible amount of tin. Location of other facilities are New York, Buffalo, Chicago, Dallas and Los Angeles. (S. A. L.)

## Baltimore Engineer Firm

Formation of the firm of Whitman, Requardt and Associates, Engineers of 1304 St. Paul St., Baltimore, Md., has been announced. The new firm, a partnership consisting of Ezra B. Whitman, Richard F. Graef, Stewart F. Robertson, Roy H. Ritter, Gustav J. Requardt, Norman D. Kenney, A. Russell Vollmer and Theodore W. Hacker will continue the engineering engagements of the now-dissolved firm of Whitman, Requardt and Smith.

Ezra B. Whitman and Benjamin L. Smith announce the formation of a limited partnership for the practice of engineering, the firm to be known as Whitman and Smith, Engineers. Headquarters will be at 11 N. Pearl St., Albany, N. Y. Engineering engagements of the Albany office of the firm of Whitman, Requardt and will be continued by the Albany firm.

## Carlock of Atlanta to Represent H. M. Harper Co.

Harris B. Carlock of Atlanta, Ga., has been appointed to represent the H. M. Harper Co., manufacturers of non-ferrous and stainless bolts, nuts, screws, washers and other fastenings, in Alabama, Georgia, Mississippi the Carolinas and Tennessee.

## W.F.A. Increases Fats and Oils For Paint Manufacture

To help alleviate the tight supply of essential paints, varnishes, lacquers, etc., the War Food Administration recently granted a 10 percent increase in the quota of fats and oils to manufacturers of these products for use during the quarter ending March 31.

## Huffman New O.P.A. Aide

Robert O. Huffman of Morganton, N. C., has been appointed head of the Knitwear and Hosiery section of the Office of Price Administration's Consumer Goods Division. Mr. Huffman has had 30 years experience in the hosiery industry, and for four and one half months prior to appointment has been chief consultant to OPA on hosiery and knit goods.

## Increased Machinery Allotments For Pulp and Paper Mills

War Production Board's Paper and Paperboard division has announced the allocation of controlled materials for the second quarter of 1944 will include an increased amount to be used for the manufacture of new pulp, paper mill and converting machinery. These additional materials are to be used for equipment that will aid in handling and preparing waste paper or otherwise improve production to guarantee the essential requirements for paper and paperboard.

## New Extrusion Machine

Designed to aid laboratory and experimental work in a wide range of extrusion processes, a combination machine is announced by the Moslo Machinery Co., of Cleveland. The new design combines a laboratory type 12-ton hydraulic extrusion press and an automatic wire feed unit in one machine occupying only two by four feet of floor space.

Simplicity of operation, convenience of control and neat modern lines feature the latest Moslo specialty. It is of welded steel construction throughout. While designed primarily for the extrusion of welding rods, the press may be had with dies for extruding powdered metals, carbon and certain plastics. The combination unit is so designed that the press can be sold without the wire feeding unit.

According to Ernest P. Moslo, designer, his new machine offers an unusually wide range of speeds on the oil cylinder. Pressure of 10,000 pounds per square inch on the material is achieved, which, combined with the automatic wire feeding, makes the machine suitable for small scale production of welding electrodes.

A separate cylinder is used for slugging, so that slugs can be performed in quantity if desired. The extrusion die-head is of a new design, at 45 degree angle. Deflection in the wire guide is said to be minimized by this design due to the fact that the flux is forced in a direction more in line with the wire guide. This should eliminate some of the trouble normally encountered in extruding with right angle die heads.

The compact combination unit is so built that it ships complete, including an extrusion die head, ready to set on a laboratory or factory floor, connect to a power line and go into action. Hydraulic and electrical controls are located in a panel at the operating end, with a pressure gauge, reading in direct pressure on the extrusion cylinder, always in view of the operator.

## U. S. Plywood Earnings

United States Plywood Corporation and subsidiary companies, the world's largest producers of plywood, report for the nine months ended January 31, 1944, a net profit of \$634,280, equivalent after preferred dividends to \$1.96 a share on the 299,932 shares of common stock now outstanding. This period covers the first three quarters of the Corporation's fiscal year, which ends on April 30, 1944.

The results compare with a net profit of \$537,722 in the nine months ended January 31, 1943, equivalent to \$2.06 a share on the 249,932 shares of common stock then outstanding.

The Corporation last July sold 50,000 shares of additional common stock and also sold \$1,500,000 of 4% cumulative preferred stock, \$100 par value, and retired the previously outstanding 20,176 shares of \$20 par preferred stock.

Mills of the corporation are located at Orangeburg, S. C., Algoma, Wis., Lakeport, N. H., New Rochelle, N. Y., Seattle, Wash., and Ayotla, Mexico. Distributing units are in Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Los Angeles, Newark, New York, Oakland, Philadelphia, Rochester, San Francisco and Seattle.

## New Synthetic Rubber Belting Announced by Goodrich

Belting made with the new synthetic rubber from Government plants, known as GR-S synthetic rubber can be joined to natural rubber belting with a vulcanized splice, it is announced by The B. F. Goodrich Company. This makes it possible to use sections of the new GR-S synthetic belting to repair existing belting when needed.

The company's standard splicing and repair materials can be used with the new GR-S synthetic belting, using the same directions given in the B. F. Goodrich manual on repairing and splicing belting.

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OR

by  
*Drexel*



## *Knights of the Round Table*

Their names are Tom and Bill and Joe instead of Lancelot and Gawain. Their deeds are greater than those of any ancient story. And the Round Table? The tables they left behind in their own familiar living or dining rooms are not magical or famous. But wait—perhaps those tables *do* have magic—the magic of home, and dear faces gathered 'round. The Drexel Furniture Company made some of these tables—circular, oval, oblong, but always beautiful. Good tables to come back to. Or—if you don't own one yet—good to look forward to, like all Drexel furniture. ✱ American men deserve to return to *gracious* homes. You who are waiting can help to bring this to pass. Now is the time to plan, the time to memorize the name Drexel.

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IN ARMED FORCES

Dept. MR, Drexel Furniture Co., Drexel, North Carolina

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MARCH NINETEEN FORTY-FOUR

57



# SHIFTS in POPULATION Demand SHIFTS in DISTRIBUTION



**Y**OUR present distribution set-up may be inadequate to meet post-war competition because of the increasing shifts in population.

Tennessee is the center of the fast-growing South and Southwest. Your factory, assembly plant, or distribution branch in Tennessee will make it possible to meet competition with quick service in this fast-developing section.

Tennessee is within 500 miles of more than 51% of the entire population of the U. S. (1940 census) and the percentage is growing.

Central location is only one of the many advantages to plant locations in Tennessee. Read the other basic advantages listed.

Manufacturers interested in meeting changing conditions and post-war competition should investigate Tennessee now.

Write for specific information and surveys relating to your particular requirements. Ask for illustrated book: "Tennessee—Land of Industrial Advantages."

Governor's Industrial Council, Department of Conservation  
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*Investigate* **TENNESSEE**  
THE FIRST PUBLIC POWER STATE

## Basic Advantages To Plant Locations In Tennessee

- ★ An unsurpassed variety of major industrial minerals and agricultural products and materials.
- ★ Huge coal reserves make possible economical steam-power generation.
- ★ An inexhaustible supply of industrially suitable water.
- ★ Inland waterway system of three great rivers for low-cost transportation to Midwest, Gulf, and World ports.
- ★ Central location permitting 24-hour delivery to more than 51% of the Nation's population.
- ★ Excellent railway, highway and airline transportation.
- ★ Cooperative native-born skilled and semi-skilled labor.
- ★ Opportunity for low-cost assemblage of raw materials or manufactured parts.
- ★ Uncongested plant sites near basic materials, river and rail terminals.
- ★ Ideal living conditions for both employer and employee.
- ★ Sound State tax structure. No personal earnings or sales taxes.
- ★ State and municipal governments friendly to industry.

## Giant "Cat Cracker"

(Continued from page 37)

signed to process in excess of 18,000 barrels a day.

"Cat Cracker No. 2," as it is called, was planned in connection with the Butadiene and Butyl rubber plants, but since the Butadiene unit was completed in August of last year, well in advance of the new catalytic cracking unit, it had to depend to a large extent for its butylene supply on the original "cat" unit.

Both the old and the new units employ the fluid catalyst process which involves the use of great quantities of powdered catalyst being circulated through the feed stock stream. The original unit at Baytown circulates about 10 tons of catalyst per minute, while the new one is designed to circulate approximately 40 tons per minute.

The two differ materially in some other respects, the latest addition embodying several mechanical and design improvements resulting from pilot plant operations in the past two years.

The up-flow principle is employed in the original unit; in the new one it is the bottom draw-off method. Conventional type furnaces for heating the charge stock on No. 1 unit have been eliminated on the new one. The necessary heat is supplied primarily from the regenerator in which carbon is burned from the spent catalyst on its way back into the reactor system for re-use. This change in design eliminates furnaces and several other large vessels, reducing the amount of equipment made from critical steel and reducing also the amount of maintenance work necessary.

Because of these design improvements the uppermost vessel in the unit is supported at a lower level than in the older unit, and the overall height is reduced by approximately 25 feet. In spite of this, however, a considerable quantity of steel went into the new unit's construction. Its massive framework, its complicated maze of pipe, and its sturdy steel vessels contain approximately 8,300 tons of steel, exclusive of the amount of steel used in the necessary machinery.

Though mammoth in size and

(Continued on page 74)



Mr. Plant Owner

## Are your buildings *Shipshape*



--ready for  
emergencies  
--or to prevent  
later headaches

Putting off needed repairs, now, can only result in greater costs or lost opportunities, later. Let us advise with you on any such needed work—inspecting and estimating, if desired, and handling all WPB details, without obligation. SCC is licensed in 7 states for any permissible work—from repairing a roof, adding a rest room to building an addition. Call or write today—on any type or size job.

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CONSTRUCTION CO. *Charlotte, N. C.*



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Remittance made on day of payment.

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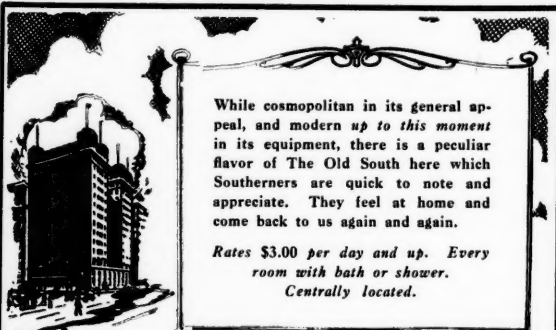
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## Investigate - and You'll Locate in ORLANDO

Florida is growing and is destined to have a tremendous growth following the war. Orlando, fast growing city of Central Florida, is ideally situated in the center of the state with convenient access to Florida's markets and materials by train, plane and trunk highways. Excellent living conditions, moderate living costs. For statistical data and special information, address Greater Orlando Chamber of Commerce, Room 152, Chamber of Commerce Building, Orlando, Florida.

## OPPORTUNITY CENTER OF FLORIDA



While cosmopolitan in its general appeal, and modern up to this moment in its equipment, there is a peculiar flavor of The Old South here which Southerners are quick to note and appreciate. They feel at home and come back to us again and again.

Rates \$3.00 per day and up. Every room with bath or shower.  
Centrally located.

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BALTIMORE 2

# TRADE LITERATURE

And Related Publications

## HIGH SPEED MILLING OF STEEL—

A 14-page illustrated technical bulletin, No. GT-147, containing detailed information on the high speed milling of steel with cemented carbide tipped cutters is available from the Carbide Co., Inc., Detroit, Mich. All factors which must be considered by the tool user or designer when designing a carbide cutter for those jobs where optimum cutter performance justifies individual tool design are treated in detail, as are speed, feed, chip space, number of teeth, power available, etc.

## CHAIN DRIVE CALCULATIONS—

In order to shorten the time required for calculating center distances and chain lengths of chain drives operating over cut-tooth wheels, Link-Belt Company has computed and published a series of tables which give very accurate results. A copy of this 20-page book No. 1991 may be had by writing direct to Link-Belt Co., 307 N. Michigan Ave., Chicago, Ill., or any of the company's branch offices.

## MECHANICAL FEED WATER REGULATION FOR BOILERS—

The sixth edition of the textbook, "Mechanical Feed Water Regulation for Boilers," by Prof. E. P. Culver, is available. It covers the principles of boiler feed water control and describes mechanical equipment available to meet various operating conditions. Containing numerous illustrations, diagrams and chart reproductions, the booklet also discusses differential pressure control and feed pump control. Letterhead requests to Northern Equipment Co., 1945 Grove Dr., Erie, Pa.

## INSURANCE TALKS AVAILABLE—

The National Chamber of Commerce, Washington, D. C., has printed a limited edition of the text of many of the important addresses delivered at the conference of the Chamber's committee on social security. While the supply lasts, copies of the reprint of addresses are available from the Chamber at \$1.00 each.

## NEW FASTENER CATALOG—

The Cleveland Cap Screw Company, 2917 East 79th Street, Cleveland 4, Ohio, announces publication of their new Catalog F covering cap screws, set screws, aircraft bolts, nuts and other fastener items. Thumb indexed for convenient reference, the catalog lies flat when open. Includes complete dimensions and weights.

## POSTWAR CONSTRUCTION—

The platform for Postwar Construction adopted by the membership of The Producers Council, Inc., has been prepared in pamphlet form and may be obtained by addressing the Council at 815 15 St., N. W., Washington 5, D. C.

## RAILROADS IN TWO WARS—

Association of American Railroads, Transportation Bldg., Washington, D. C., has published an informative folder, Railroads in Two Wars, which vividly portrays the performance of rail carriers in World War I and the current conflict. The booklet is profusely illustrated with photographs and charts.

## POSTWAR PROBLEMS & PLANNING—

R. Voigt & Son Co., 1080 Military Rd., Buffalo, N. Y., makers of industrial steel products, invite individuals and organizations interested in postwar problems of expansion or diversification to communicate with them for more complete details.

## NEW TUBE VOLTMETER—

A new tube voltmeter featuring high frequency probe, especially designed for greater efficiency, especially at high frequencies such as those encountered in television and frequency modulation, has been developed by Alfred W. Barber Laboratories, 34-02 Francis Lewis Blvd., Flushing, N. Y. Ask them for descriptive folder of Model VM-27E.

## NEUTRAL BATH FOLDER—

The A. F. Holden Co., Metallurgical Engineers, New Haven, Conn., recently issued an informative booklet covering neutral baths. Profusely illustrated and containing diagrams, the booklet contains new information and definite possibilities whereby additional savings to the users can be effected. Request to the company will bring copy.

## STOCK TOOL BULLETIN—

A 4-page stock tool bulletin, No. 44-1, covering its revised line of single-point, diamond ground carbide tools has been published by Tungsten Carbide Tool Co., 2661 Joy Rd., Detroit 6, Mich. Complete specifications and prices of all tools carried in stock are listed, and show a sharp reduction from those prevailing in 1943.

## NEW SQUARE-D BULLETIN—

A complete bulletin on Saflex Plug-in Duct, Saflex Feeder Duct, Square-Duct and Screw Cover Duct for electrical distribution has been issued by the Switch & Panel Division of the Square D Co., 6060 Rivard Street, Detroit, Mich. The bulletin includes complete description and application data, prices and understandable diagrams and illustrations.

## GEORGIA'S MINERAL RESOURCES—

The Department of Mines, Mining & Geology, State Division of Conservation, 425 State Capitol, Atlanta, has issued a directory of Georgia's mineral producers, including a capitulation of the State's mineral resources with maps keyed to show county locations of the different deposits.

## Postwar Housing Primarily Job For Private Enterprise, Says Housing Administrator

Housing in the postwar period will be primarily a job for private enterprise and the responsibility for planning should rest with communities themselves, National Housing Administrator John B. Blandford, Jr., has testified before the House Public Buildings and Grounds Committee.

The main post-war undertakings of the Federal Government in relation to housing should be in a fiscal, insurance and credit framework, with any aid given to publicly financed housing made a part of "the whole housing picture," Mr. Blandford said.

"If our housing future is shaped in these terms, a program of 1,000,000 to 1,500,000 houses a year for a 10 to 20-year period, becomes clearly an attainable goal," he added. "This might mean a capital investment, preponderantly private, running up as high as \$8,000,000,000 a year and a volume of employment running up to 4,000,000 or 5,000,000 workers—taking no account of the indirect economic benefits of such a program."

## W.P.B. Examining Transition to Peace-time Production

Chairman Donald M. Nelson said recently that the War Production Board is examining with leaders of various consumer goods industries the problems that will arise when the time comes for transition back to peace-time production. These discussions, which are being held with the members of a number of WPB industry advisory committees, will be supplemented by meetings with labor groups.

1. There can be no immediate general resumption of the manufacture of consumer goods, because military programs still have first call on the nation's resources and neither manpower, manufacturing facilities nor component parts for large-scale consumer goods production are now available.

2. Nevertheless, it is essential to make plans now so that when the proper time does come the transition from a war economy to peace-time production is as smooth, as rapid and as fair as possible.

3. Collection of facts and full, frank discussion with industry and labor of the difficult problems involved is a necessary part of such planning.

## House Bill Authorizes Synthetic Fuel Project

CONSTRUCTION and operation of demonstration plants to develop synthetic liquid fuels from coal, oil shale, and other substances is authorized in a congressional bill sponsored by Rep. Jennings Randolph of West Virginia. The bill further authorizes an appropriation of \$30,000,000 to carry out the program.

Under provisions of the bill the secretary of interior, acting through the Bureau of Mines, would construct, maintain and operate one or more plants to produce the synthetic fuel. Size of the plants would be limited to the minimum that would permit the government to furnish industry with necessary cost and engineering data for development of synthetic fuel facilities.

## New Rural Electric Lines Being Built in Missouri

A RICH dairy area south of Springfield, Mo., will be electrified as the result of 50 miles of rural electric lines now being constructed by Kelso-Burnett Electric Co., of Chicago, Ill., under contract with the White River Valley Electric Cooperative, Inc. The project consists of nine extensions to the cooperative's existing system.

Contracts will be let within a few weeks for an additional 75 miles, plans for which are now being prepared by Frank Horton & Co., engineers of Lamar, Ill. The contract will involve 18 short additions and two longer ones of about 12 miles each.

One will take electric service to the Ava area of Douglas County. Not now electrified, Ava is the center of another important dairy area. A milk plant and two cheese factories are located in the community. The project is expected to relieve the critical labor shortage.

## Bethlehem Steel Buys DPC Built Coke, Furnace Units

STEEL making facilities built by the Defense Plant Corporation at Bethlehem, Lackawanna and Steelton, Pa., and Sparrows Point, Md., have been bought by Bethlehem Steel Co., Inc. Coke ovens and blast furnaces were included in the transaction, which was understood to involve \$22,000,000, the actual construction cost.

## Liberty Ship Names

Two Liberty ships now on the ways at the yards of the Delta Shipbuilding Co., New Orleans, La., are to be named for southern men, John M. Parker (1863-1939) and Cecil M. Bean (1870-1940). Parker, a native of Bethel, Miss., was for many years prominent in the cotton business in New Orleans and in 1920 became governor of Louisiana for one term. Texas was the birthplace of Bean, a marine engineer. He served as chief on the S. S. Oliveette, the ship on which President McKinley's famous "Message to Garcia" was carried by Sergeant Andrew Rowan. Bean was employed with the Bureau of Marine Inspection and Navigation for almost 35 years.

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## BALTIMORE, MD.

### Dredging—Construction—Engineering

Distributors of Sand-Gravel-Stone and Commercial Slag

#### A COMPLETE ORGANIZATION

Our complete organization with years of experience in successfully executing large construction contracts of various kinds is prepared to undertake the construction of earth, masonry and concrete dams, drydocks, dredging of all kinds, river and harbor improvements, deepening channels, hydraulic filling and rock work, tunnels, railroad construction, sewers and waterways.

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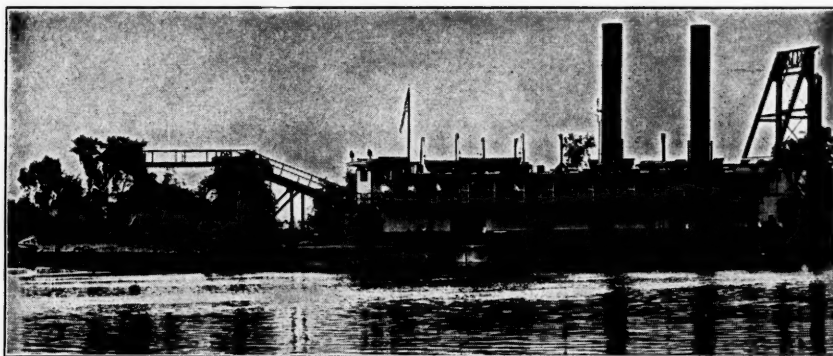
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FILLING, LAND RECLAMATION, CANALS, PORT WORKS  
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We are especially equipped to execute all kinds of dredging,  
reclamation and port works in Southern waters.  
Correspondence invited from corporate and private interests everywhere.

Contractors to the Federal Government

**ATLANTIC GULF AND PACIFIC CO.**

15 Park Row, NEW YORK 7

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## Glenn L. Martin, Pioneer

(Continued from page 33)

Catalina Island in 1912. He was building Army TT trainers a year later.

A man of vision, who has seldom guessed wrong, Martin said in August, 1914:

"The aeroplane will practically decide the war in Europe. Veritable flying death will smash armies, wreck mammoth battleships and bring the world to a vivid realization of the awful possibilities of a few men and a few swift aerial demons. . . The generals who realize this quickest and fight first with the flying death will win." It took another war two decades later to prove the truth of this statement.

Martin was looking ahead in other fields even then. A Martin plane dropped the first bombs in 1913 and the French aviator, Didier Masson, dropped the first bombs that same year on a Mexican city to help quell an uprising.

A Martin plane armed with a Winchester was called the "Aeroplane Destroyer," significant of far-sightedness in the field of aerial combat.

American planes saw little action in the last war, but the Martin MB bomber, developed and constructed in the plant at Cleveland, became the standard Army bomber for the succeeding decade. It was in this type that General Billy Mitchell demonstrated the effectiveness of airpower against seapower in 1921 in the 21-minute sinking of the German battleship Ostfriesland. Navy bombers, three-purpose torpedo-bombers were being built in the twenties.

In 1929, Martin moved to Baltimore, acquiring 1,260 acres at Middle River. It was here the B-10 was built, winning for him the Collier Trophy from the hands of President Franklin D. Roosevelt. Then came the China, Philippine and Hawaiian Clippers for Pan

American and the Russian Clipper. They were the largest seaplanes of their day. As war clouds gathered over Europe and Asia, Martin turned his full effort into military aircraft. Another phase of aerial combat was also developed in the power-operated turrets, the first being built here in 1937. They are now on 12 separate types of combat airplanes, including all Martin planes and Liberators, Venturas, Bostons, Coronados, some Flying Fortresses and others. The Martin Company is the largest manufacturer of such turrets. Under his direction the Mareng Cell, the self-sealing fuel tank, was developed and it has great promise for the future.

Thus the iron-gray-haired manufacturer of airplanes, Glenn L. Martin, who looks far more youthful than his 58 years, is still looking to the future. His primary interest is seeing that the war is won and won quickly, but there are times when his mind travels ahead to the days of peace when air cargo will mean much in the making of a better world for us to live in.



MOVE MATERIALS FOR WAR AND PEACE  
IN **Fulton WATERPROOF COTTON**  
**AND BURLAP PAPER LINED BAGS**

In these times bag production is war production. Our plants have supplied millions of sand bags as well as various other items for use in combat areas. Behind the lines, supplies of food and other material are transported thousands of miles in bags specially designed to protect contents against hazards of rough handling, moisture and insects. Back here at home bags must move a long list of essential commodities ranging from small machine parts, through dozens of items of food, feed and produce to the hygroscopic chemicals requiring special waterproof packages. Many Fulton Waterproof Paper Lined Bags are replacing containers made of critical materials—metal drums, wooden boxes and barrels.

The output of our plants will continue to be devoted to these essential requirements until Victory itself is "in the bag."

**FULTON BAG & COTTON MILLS**

Manufacturers since 1870  
Atlanta Minneapolis New York St. Louis New Orleans Dallas Kansas City, Kan.

## Bothered By Grievances? KEEP TOILET ROOMS AT SUNDAY BEST ... Houseclean Now!



## Sanymetal\* ASBESTOS-BOARD TOILET COMPARTMENTS

Inadequate or unsanitary toilet rooms imperil physical fitness of workers, lead to irritation and resentment. Foretell bad feeling by replacing old, dirty compartments and fixtures, cleaning walls and floors, improving light and ventilation. Sanymetal Asbestos-Board Toilet Compartments give a lift to factory toilet rooms, encourage orderliness and promote good feeling.

**SAVE TIME AND MONEY BY INSTALLING SANYMETAL TOILET COMPARTMENTS:** One order, one priority covers everything you need for completing installation of toilet compartments, even complete door hardware and partition fittings. Sanymetal Toilet Compartments are economically designed and built by specialists with over 28 years' experience. Durable and rigid installation provided by laminated cement asbestos-board which affords a strong structure resistant to fire, wear and moisture, free from dirt-collecting pockets and ledges; easy to keep clean. Write for Bulletin No. 940 for complete data on Sanymetal Asbestos-Board Toilet Compartments. For quick action, see "Partitions" in your phone book for Sanymetal Representative. Special toilet room modernizing check list available on request.

**THE Sanymetal\* PRODUCTS CO., INC.** 1728 Urbana Rd. Cleveland, Ohio

\* TRADE MARK REG. U. S. PAT. OFF.

**Fight Rust and Wear...  
Conserve War-Vital Metals...**



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BLACK COATING  
FOR METAL SURFACES AND BUILT-UP ROOFS

CAREYCLAD protects metal against rust and weather—is extremely durable, abrasion resistant, and resistant to acid, alkaline and salt solution and to moist, atmospheric conditions. It is a practical, low-cost coating for metal buildings, iron sheets, structural steel, bridges, heavy machinery, and numerous sheet metal products. Applied by spray painting or brushing, at everyday indoor or outdoor temperatures. Promptly available through CAREY Branches and Distributors. Write Dept. 61 for details.

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Dependable Products Since 1873

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WAR BONDS...  
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Wood Preservers Since 1878

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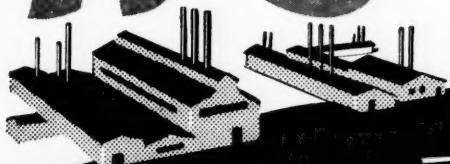
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**PROTECTED STEEL  
PRODUCTS**

General Office and Plant,  
WASHINGTON, PA.

# Norfolk Looks Ahead

(Continued from page 41)

ern cities.

Banking resources of Norfolk and adjacent Portsmouth as of December 31, 1943 stood at an all-time high of \$208,686,173, a gain of nearly 118 percent since December 31, 1940. Deposits increased along with resources, reaching a total of \$196,165,435 as compared with \$84,965,989 three years ago. Banking assets such as these will materially aid further industrial development.

Tax rates on realty in Norfolk proper are \$2.50 per \$100 of assessed valuation with assessments about 70 percent of actual value. In the county the rate is \$2.00 with about the same percentage of assessment applying. Tools, machinery and equipment are taxed at \$1.00 per \$100 of assessed valuation, with assessments running about 65 percent of value. The state of Virginia has no state tax on realty.

A majority of the labor is native-born, much of it coming from the nearby counties of Virginia, Maryland and North Carolina and thousands of these workers can trace their ancestry back to pre-colonial times. They are better educated than workers found in many industrial areas, and are proud of an American heritage which scorns the radical leadership which has infested so many industrialized communities.

Already the site of great and diversified industrial enterprises, hub of a great transportation network, populated with thousands of skilled native American workers who are being properly housed, lead by industrialists, bankers and business men who are thinking and planning for the postwar future, it safely may be said the prophecies of Norfolk's greater development in the not-distant future rest on a solid foundation.

## Salvage Program for Storm-Damaged Texas Timber

Setting up a 400,000-acre timber salvage program in East Texas, which has for its objective the production in the next six months of up to 100 million board feet of lumber and one million cords of pulpwood for war needs, has been announced by Secretary of Agriculture Claude R. Wickard. The project already is under way and was placed in full operation by March 1.

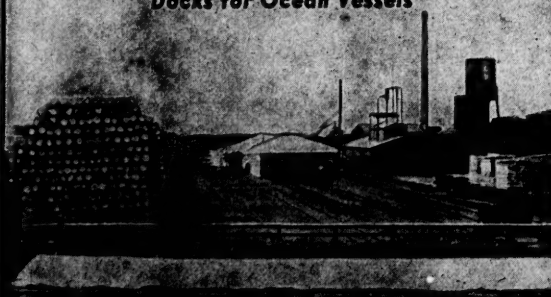
The Texas Timber Salvage Program, as it is called, was made necessary by damages to standing timber from the severe ice and sleet storm which struck part of eastern Texas and western Louisiana, January 13 and 14, this year. The storm covered an area of about 5,000,000 acres along the Sabine river, with the heaviest damage concentrated within about 2,000,000 scattered acres.

A survey made under direction of Joseph C. Kircher, forester in charge of the Forest Service Southern Region—showed that there was enough damaged timber on about 400,000 acres, where damage by storm was concentrated, to justify a Federal salvage operation. This area centers around Lufkin, Texas.

## \$1,200,000 Alabama Plant Planned

The Defense Plant Corporation, a R. F. C. subsidiary, has authorized construction and equipment of a \$1,200,000 magnesium plant at Anniston, Ala., according to Secretary of Commerce Jesse Jones.

**CREOSOTED**  
Piling, Poles, Lumber, Cross Arms,  
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Also Wolmanized Lumber  
Decay and Termite Proof—Can Be Painted  
Docks for Ocean Vessels



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—WELDED OR RIVETED—



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**WELDED OR RIVETED CONSTRUCTION**

This applies to field as well as shop built equipment.

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**DAVIS Cypress TANKS**

Take Care of Themselves—Why?

Well, they are built of well known cypress and 50 years' practical experience. Installations all over the South. We make good wood pipe also. Ask for catalogue.



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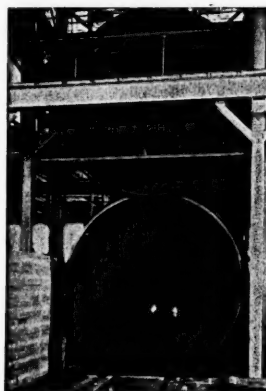
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ACCESSORIES—WELDED PIPE—RIVETED PIPE

General Steel Plate Construction  
designed for your requirements.

LANCASTER IRON WORKS, INC.  
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## Delta Proposes New Air Routes

Delta Air Lines, a pioneer company in the aviation industry, proposes new air lines in the postwar era that will greatly augment their present service, linking many of the industrial and agricultural areas of the South with the industrial cities of the North, East and middle-West, also Havana, Cuba.

In 1929, when scheduled commercial flying was in its infancy, Delta inaugurated air transportation across the deep South. As early as 1925 the same operating group launched the world's first commercial crop-dusting enterprise with a fleet of 18 planes, and in 1928 flew the first international airmail and

passengers on the West coast of South America between Peru and Ecuador.

Delta's projected services will link the principal cities of the South with New York, Philadelphia, Baltimore, Washington, Cleveland, Chicago, Louisville, Kansas City, Tulsa, Oklahoma City, Jacksonville, Miami and Havana.

In its entire history this Southern incorporated and owned air service has recognized two responsibilities to the cities it serves—local service to meet the needs of communities along its routes, and the necessity for expanding through-service for the travelers who must make longer journeys.

## Alabama Tax Report

Alabama's State Department of Revenue, in making its annual report to the governor, has adopted a form and procedure that might well be followed by other states, especially those interested in giving the prospective manufacturer or industrialist a clear picture of how the tax revenues of the state are received and disbursed, along with pertinent information as to exact sources and amounts of revenues and their channels of disbursement.

The report is prepared in an attractive booklet form, illustrated with simple charts and graphs as well as a center spread of photographs visualizing highways, schools, forestry, police,

public health and other services supported by the tax dollar.

In the chart illustrating where the state tax dollar comes from, it is interesting to note the bulk of Alabama's state revenue comes from sources that might with all fairness be termed "sales taxes." Although the six cents per gallon tax on motor fuels is the largest single source, the general sales and use tax of 2 per cent is the second largest revenue producer, with tax on incomes in third position providing less than one-third the revenue of the first two.

General property tax holds fourth position; tax on tobacco products stands next, while corporation taxes (franchise, \$2.00 per \$1,000 capital, permit,

entrance and filing fees) produce less than 2 millions of the state's nearly 60 millions of tax revenue.

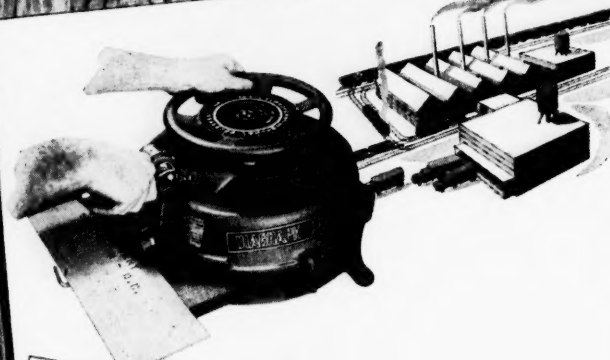
A limited number of copies of the report are available to persons or firms interested, and will be forwarded on request to the Alabama Department of Revenue, Montgomery, Ala.

## Owners of Used Construction Machinery Urged to Sell

Military, Lend-Lease and essential civilian demand for heavy construction machinery is expected to increase, and this places upon all owners of used construction machinery the patriotic duty of selling their idle equipment, says Henry M. Hale, Director of the War Production Board's Construction Machinery Division.

"Since 90 per cent of all new equipment is now needed overseas, the bulk of essential construction work at home is being carried on with used equipment," Mr. Hale said. "Practically all new equipment as well as some used equipment will without doubt be required overseas as military operations expand and additional territory is reclaimed from the Axis. This means that we cannot afford the luxury of idle equipment, stored away and waiting for peacetime work. Cranes, shovels, motor graders and tractors are especially needed."

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**STENCIL ADDRESS YOUR SHIPMENTS** with easily read, permanent stenciled markings—they'll roll faster, and costly delays in transit will be eliminated.

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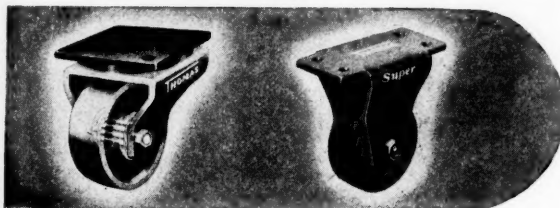
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The Thomas Super Caster is all that its name implies—Super in construction and performance under severe service where most casters are unsatisfactory. Use them for your hardest, toughest jobs. The Super Swivel fork is formed from one piece of 1/4" steel plate, offset for added strength. Ball race cups and King bolt welded in place and all moving parts are hardened to move freely and resist wear.

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MARCH NINETEEN FORTY-FOUR



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In many, many cases Layne Well Water Systems, due to their extra reserve of power and productivity, have saved untold thousands of dollars worth of property in cases of sudden emergency.

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For fully illustrated literature on Layne Well Water Systems, address Layne & Bowler, Inc., General Offices, Memphis 8, Tenn.

**AFFILIATED COMPANIES:** Layne-Arkansas Co., Stuttgart, Ark. \* Layne-Atlantic Co., Norfolk, Va. \* Layne-Central Co., Memphis, Tenn. \* Layne-Northern Co., Mishawaka, Ind. \* Layne-Louisiana Co., Lake Charles, La. \* Louisiana Well Co., Monroe, La. \* Layne-New York Co., New York City \* Layne-Northwest Co., Milwaukee, Wis. \* Layne-Ohio Co., Columbus, Ohio \* Layne-Texas Co., Houston, Texas \* Layne-Western Co., Kansas City, Mo. \* Layne-Western Co. of Minnesota, Minneapolis, Minn. \* International Water Supply, Ltd., London, Ontario, Canada.



**WELL WATER SYSTEMS  
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**BUILDERS OF WELL WATER SYSTEMS FOR  
EVERY INDUSTRIAL AND MUNICIPAL NEED**



## New Maps of Georgia Kaolin

The leading kaolin-producing district in the United States trends westward across Washington, Wilkinson, and Twiggs Counties, Georgia. In 1941 the production of Georgia kaolin, as reported by the Bureau of Mines, U. S. Department of the Interior, exceeded 787,000 tons, which was used mainly in the paper, rubber and ceramic industries. Various processes for producing aluminum from clay are now being tested by several Government agencies to determine the possible use of kaolin as a source of that metal, which is needed in large quantities for the war effort.

To aid in the prospecting for kaolin in Georgia, geologic maps of Twiggs and Washington Counties, each with a brief descriptive text, have been prepared by members of the staff of the Geological Survey, U. S. Department of the Interior. A similar map of Wilkinson County was released by the Geological Survey on November 29, 1943. These three maps cover most of the Cretaceous sedimentary kaolin district of Georgia, in which reserves of kaolin are considered to be very large. Copies of the maps may be obtained by those directly interested upon application to the Director, Geological Survey, Washington 25, D. C.

## Military Textile Requirements For 1944 Will Be Met Despite Difficulties

All military requirements for textiles will be met in the coming year, and from 40 to 50 per cent of total production will

## U. S. Sugar Diversifies

(Continued from page 39)

ing and north of Lake Okeechobee. Numerous surveys were made and levels run. Not long after the turn of the present century the Department of Agriculture made an extensive report on the Everglades. Successful conclusion of litigation establishing title to the lands saw important land sales to provide the finances to carry out the drainage plan. (S. A. L.)

be available for essential civilian needs, it was predicted recently by W. Ray Bell, president of The Association of Cotton Textile Merchants of New York in his report at the annual meeting of the organization in New York City. Essential cloth requirements for industrial and agricultural uses connected with the war effort will be met, he said, as well as vital quantities for allied and occupied countries, despite increasing production difficulties due to manpower shortages, inflexible prices in the face of rising labor and raw material costs, and other adverse factors.

"The central problem facing the industry is that of production," Mr. Bell asserted. "Wartime operations in cotton mills reached their peak in the second quarter of 1942. Since then, the

accelerated drain of manpower for the services and war industries has continued at an alarming rate in spite of the most strenuous efforts on the part of mill management. Abandonment of third shift production has been forced on many plants and some sections of the industry report it difficult to maintain two full shifts.

"A satisfactory solution to the critical manpower situation in our industry is not yet in sight. In many divisions of the industry increased production from overtime work would be difficult without reasonable adjustment of current price ceilings to compensate for the added costs. Inflexible prices, in the face of rising costs for labor and raw material, have been a contributing deterrent to extra normal operations."

Mr. Bell cited the requirements of the war effort as the chief reason for the need for increased production of textiles, adding that a secondary advantage would be "partial relief from the multiplicity of restrictions and directives relating to channels of distribution." He praised the Textile Division of the War Production Board for its skillful and cooperative handling of successive developments in regulation, climaxed by Conservation Order M-317.

## South's Spindles at War

The southern cotton spinning industry continues operating at peak capacity, mostly for war needs. The South's cotton spindles in January operated a total of 8,202,508,932 spindle-hours; New England spindle hours were 1,287,813,497, while those in the remainder of the country totaled 333,448,650.

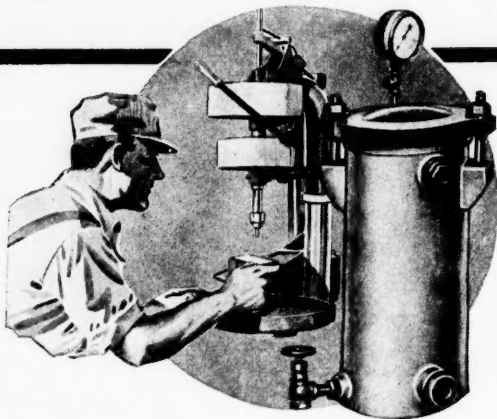
## How a BOWSER FILTER IN AN INDIANA PLANT Tripled Tap Life and Paid for Itself in 30 Days...

An Indiana war plant had a bottleneck . . . taps used on 20 mm. shells were wearing out too fast . . . steel particles in the cutting oil chewed them up.

Bowser Pressure Filters were installed. Complete elimination of the abrasive in the oil promptly tripled the life of the taps and cut to one-third the time and expense of changing and redressing.

That's only part of the story. Scrap shells, due to faulty tapping, were virtually eliminated. Rejections, due to undersized threads, were reduced 85 per cent.

And plant executives figured that the filters paid for themselves in less than thirty days.



Filters are only one of the many types of Bowser equipment that would likely make your plant operation more efficient, productive and economical. There are, for instance, Bowser meters, proportioners, lubrication units, pumps, stills, oil conditioners. *Wherever liquids are handled, there's a need for something that Bowser makes.* BOWSER, INC., Fort Wayne, Indiana.



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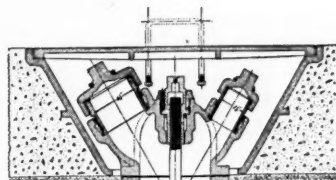
There is need now of "facing the problems of peace in advance of victory." We are glad to cooperate by furnishing data and information so that you may incorporate M&H Valves and Hydrants in your specifications for postwar factory changes and improvements. Blueprint now and be ready.



Gate Valve



Check Valve



FLUSH

Used in places where standard hydrant might interfere with traffic or industrial operations.

HYDRANT

Sets completely under ground. Accessible by lifting cover. Standard inside construction with a 2 1/2" and a 4" nozzle.

M & H GATE VALVES are cast iron body, bronze mounted, with double-disc parallel seat or solid wedge top, non-rising stem or outside screw yoke. They come either with flanged or screwed connections. Valves for fire protection lines are marked "UA-FM" to denote approval of both the Underwriters and the Factory mutuals.

M & H FIRE HYDRANTS are revolving head, dry top, bronze mounted. They also are approved by "UA-FM". Entire main valve assembly is removable through barrel without digging. Special Traffic Model is fitted with breakable bolts and stem coupling, designed to break at ground line under impact. Repairs are made simply by renewing bolts and coupling, without shutting off the water.

### M & H PRODUCTS INCLUDE

FIRE HYDRANTS  
GATE VALVES  
TAPPING VALVES  
WALL CASTINGS  
SPECIAL CASTINGS  
TAPPING SLEEVES  
CHECK VALVES  
FLOOR STANDS  
EXTENSION STEMS

SHEAR GATES  
MUD VALVES  
VALVE BOXES  
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SLUDGE SHOES  
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FLARE FITTINGS  
FLANGED FITTINGS  
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CUTTING-IN TEES

**M & H VALVE**  
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# GOOD VALVE CARE is just good business

NOW, especially, when the demand for valves is taxing deliveries, it is imperative that you make your present valves last longer and serve better.

It's a challenge to every maintenance man to keep an eagle eye on the valves he now has in service . . . to see that they are checked and serviced regularly and thus forestall, as far as possible, the need for new valves.

Lunkenheim Valves are easy to keep in good condition. Simplicity of design, with a minimum of working parts, makes them readily accessible for inspection and maintenance follow-up.

Let your Lunkenheimer distributor help you with your maintenance, repair and operating problems. His facilities and experience are at your call.

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**THE LUNKENHEIMER CO.**  
"QUALITY"  
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## LUNKENHEIMER VALVES

## February Industrial Expansion

(Continued from page 46)

miscellaneous construction is expected to cost \$35,000 while \$255,000 will be used in obtaining underground feeders and extensions and \$600,000 is contemplated for a new sub-station in Northeast section of the city.

**NASHVILLE**—Remodeling—Mrs. Martha Ballard Dodson, Jackson Blvd., remodel building for General Shoe Corp., 511 Gallatin, Lessee, for shoe polish manufacturing plant.

### TEXAS

**ALVIN**—Warehouse—Southern Warehouse Corp., has plans by Joe Finger, Inc., 7th Floor, National Standard Bldg., Houston, Archt. for rice warehouse and dryer, consisting of 38 rein. conc. 800-bbl. capacity storage bins, 30 tempering bins and dryer enclosures.

**BAYTOWN**—Reservoir—General Tire & Rubber Co., H. M. Bowen, Engr., plans 2,500,000 gal. reservoir, 600 cu. yd. separator and dragline work at synthetic rubber plant; Brown & Root, Box 3; Tellepsen Construction Co., 3900 Clay Ave., and W. S. Bellows Construction Co., Box 2132, estimating, all Houston.

**CORPUS CHRISTI**—Plant—Chemical Construction Corp., 30 Rockefeller Plaza, New York, has contract for 50 per cent addition to plant of American Cyanamid & Chemical Corp.; Defense Plant Corporation owners.

**DALLAS**—Factory Building—National Construction Co., Texas, Gulf States Bldg., has contract for one-story factory building, to be erected at 1000 Forrest St.; to cost approximately \$47,400; Guiberson Corp., 1600 Forrest St., owners.

**DECATUR**—Food Locker Plant—C. P. Dodson and Ralph Dodson erecting locker storage plant.

**FORT WORTH**—Plant—Erwin Manufacturing Co., has plans in progress for bag manufacturing plant; Lockwood and Andrews, Engrs., Union National Bank Bldg., Houston.

**FORT WORTH**—Building—Crown Machine & Tool Co., 2800 W. Lancaster St., erect office and manufacturing building; brick and tile; 36x20 and 78x121 ft.; cost \$9,850 and \$24,500; owner builds; Fooshee & Cheek, Archts., 1001½ N. Harwood St., Dallas.

**FREESTONE COUNTY**—Pipe Line—Lone Star Gas Co., Dallas, started work on construction of 1½ mile, 6-in. welded pipe line to transport natural gas from Stewards Mill gas producing area in Freestone County to company's interconnected pipe line system; daily capacity of 11,000,000 cu. feet of gas; from the field, southeast of Streetman, new line will extend west and tie into company's 10-in. line at a point north of Wortham; Sharmon & Allen, Oil & Gas Bldg., Houston, Gen. Contr.; supervision for Lone Star Gas Co. by Julian L. Foster, chief engineer and general superintendent.

**GAINES COUNTY**—Plant—Phillips Petroleum Co., Philtower Bldg., Tulsa, Okla., plans gasoline plant in the Seminole field in Gaines County; 57 miles of gathering lines will supply 20,000,000 cubic feet of gas daily; connection with Phillips' Odessa-to-Borger pipe line will provide an outlet.

**HOUSTON**—Plant Facilities—Defense Plant Corp., executed contract with Southern Acid & Sulphur Co., Rialto Bldg., St. Louis, Mo. for plant facilities at Houston; cost \$3,400,000.

**HOUSTON**—Remodeling Coca-Cola Co., 707 Live Oak St., remodel bottling plant; Linbeck & Dederick, 2017 W. Gray Ave., has contract; Selders-Schnorbus Co., 1814 Texas Ave., contract for electric wiring; Lee Rogerson Co., 308 Truxillo St.

**HOUSTON**—Warehouse—Brown Construction Co., Greenwood Drive, Houston, has contract for construction of one story building, at 5521 Navigation Blvd.; Fairbanks Morse Co., 5521 Navigation Blvd., owner; cost, \$18,000.

**HOUSTON**—Plant Addition—R. J. Lane, 4006 Chenevert St., Houston, has contract for general remodeling of present building and one story asbestos siding addition, at 6007 Main St.; Orange Julius Co., 6007 Main St., owner.

(Continued on page 72)



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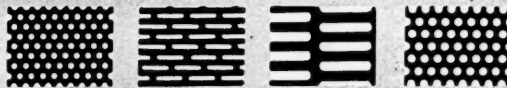


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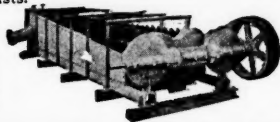
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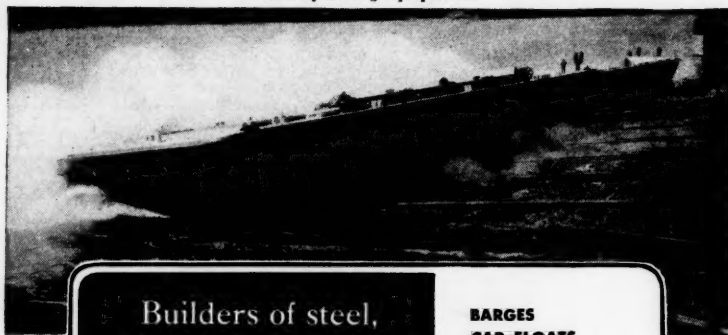
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## February Industrial Expansion

(Continued from page 70)

**HOUSTON**—Plant Building Remodeling—Schneider Construction Co., 3004 West Dallas Ave., Houston, has contract for general repairs and remodeling of plant building at 19 Chenevert St.; cost approximately \$12,000; private plans; National Biscuit Co., 19 Chenevert St., Houston, owners.

**LLANO**—Locker Plant—Stanley Stribling, Rotan, and C. E. Shults, of Llano, interested in constructing storage locker plant.

**McALLEN**—Dehydration Plant—Valley Vitamins, Inc., H. L. Titus, V. P., erect \$200,000 dehydration plant; 4 buildings; brick and rein. conc.; 1-story each; rein. conc. frame and found.; built-up roof.

**Plant**—Defense Plant Corp. granted additional funds to Dow Magnesium Corp., Midland, Mich., to provide additional equipment for plant at Velasco; cost \$180,000.

**MISSION**—Remodeling—Bordo Canning Co., remodel processing plant; 1 and 2 stories; brick and rein. conc.

**Refinery**—Consumers Cooperative Associated, Howard A. Cowden, 1500 Iron St., North Kansas City, Mo., plans purchasing a \$2,000,000 refinery to serve farmers co-operatives in Texas, Oklahoma, New Mexico and Colorado.

**SAN ANTONIO**—Bakery—Alamo Bakery Co., Elias Escamilla, 803 Wyoming St., San Antonio, construct bakery, Wyoming and Cherry Sts.; brick and tile; 83x110 ft.; gravel roof; owner receiving bids on excavation and foundation; painting, roofing, brick and tile work; day labor; Leo M. Dielmann, Archt., 145 North St.

**TEXAS CITY**—Steel Hoppers—Tin Processing Plant, plans steel hoppers; Wyatt Metal & Boiler Works, Washington and MKT Tracks, Alamo Iron Works, Box 225; Mosher Steel Co., Box 279, Bason Steel Works, 3118 Harrisburg Blvd., all Houston; Robert J. Cummins, Bankers Mortgage Bldg., Houston, Engrs.

**YOAKUM COUNTY**—Plant—Shell Oil Co., Inc., Mayo Bldg., Tulsa Okla., and Coltex Corp., plans erection of a second plant in the Wasson Area in Yoakum County; to handle 50,000,000 cubic feet of gas daily.

### VIRGINIA

**CHRISTIANSBURG**—Locker Plant—Southern States Christiansburg Frozen Food Cooperative, Max Fleischer, Chenn, interested in establishment of frozen food locker plant in Christiansburg and auxiliary plants at Blacksburg, etc.

**MANASSAS**—Locker—Prince William County Chamber of Commerce appointed committee with Edgar G. Parrish, Chairman, to plan establishment of a frozen food locker plant.

**NORFOLK**—Buildings—Ballard Fish & Oyster Co., west end of Southampton Ave., plans rebuilding burned plant.

**TAPPAHANNOCK**—Locker Plant—The Virginia Ice and Coal Co., Inc., plans frozen food locker plant.

### WEST VIRGINIA

**HUNTINGTON**—Plant—Sylvania Electric Products, Inc., Clarence Wagner of Williamsport, Pa., company's architect, receive bids March 15 for \$1,000,000 factory to be built in west section of city; consists of 2-story, brick and steel buildings.

**NEW MARTINSVILLE**—Facilities—Defense Plant Corporation executed contract with Pittsburgh Plate Glass Co., Pittsburgh, Pa., for facilities at a plant; \$420,000.

### Oklahoman to P.A.W.

Claude P. Parsons of Duncan, Okla., has been appointed assistant director of the Division of Materials of the Petroleum Administration for war. Mr. Parsons is on leave from the Halliburton Oil Well Cementing Co. of which he is vice president.

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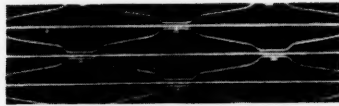
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## Industrial Lighting Luminaire

Designed for easy continuous strip installation, a new light-weight fluorescent luminaire with one-piece, double-length hood and two full-size reflectors is announced by Westinghouse Electric and Manufacturing Co. Available for use with four or six 40-watt or four 100 watt Mazda F lamps, the new Type F N C luminaire is the equivalent of two conventional units. The hood is fabricated from sheet steel with all ballasts, lamp holders, and starter sockets mounted and wired as part of the channel assembly. New sliding hangers permit suspension from any part of the hood. Mounting arrangements are available for any application. Moisture-resistant, non-metallic reflectors are covered with a multi-coat polymerized finish which provides a reflection factor of 85 per cent or more. Wing-lock permits easy removal of reflectors for cleaning.

## New Armstrong Cork Products

Armstrong Cork Co., of Lancaster, Pa., has issued a new folder describing two new fiber sheet packing materials and what is described as a fibrated leather composition. The first two—numbers 1242 and 743—are for gasket materials. No. 1242 is a low-priced material for sealing oil, gasoline and water. No. 743 was developed to meet the need for a gasket material which will not corrode alloys of aluminum, magnesium, steel, zinc or copper. The fibrated leather composition is for sealing oil, water or gasoline and is said to be for other general gasketing purposes also.

## Texas "Cat Cracker"

(Continued from page 58)

complicated in structure, both the old and new units are almost entirely automatic and require relatively small operating staffs. Their work is confined almost entirely to the control room whose walls are a series of large panels filled with gauges, meters, and electrical control instruments.

The operating personnel for the new Baytown unit was trained at the older unit while the new one was under construction.

H. W. Kellogg Company, New York, was the contractor for the unit.

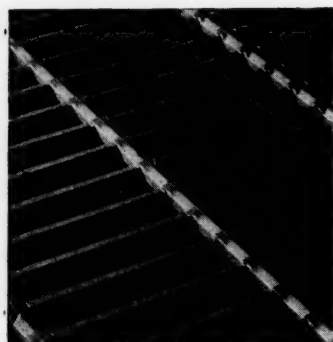
## Booklets on Rosan System

Bardwell & McAlister, Inc., 911 North Orange Drive, Hollywood 28, Calif., has issued two folder booklets on the Rosan locked in threaded insert and stud system, a procedure by which inserts and studs may be locked in hard and soft materials invented by Jose Rosan, an aircraft industry designing engineer. The Rosan steel insert or stud is pointed to as a permanent fastening for plastics, woods or other soft materials. The principle of the system is simple. It involves a locking ring, serrated inside and out by a broaching process. This engages its inner teeth with a serrated collar on the insert or stud. The parent material is first drilled and tapped for the insert or stud and then counterbored. Diameter of the counter bore is slightly less than the outside diameter of the locking ring and when the locking ring is forced into the counterbore, its outer teeth or splines broach their way to the surface of the parent material. The chips fall into the lower section of the counterbore. Pressure of the surrounding material causes the ring to close in upon the serrated collar tightly and to take up tolerances to make a solid and permanent unit of the two parts.

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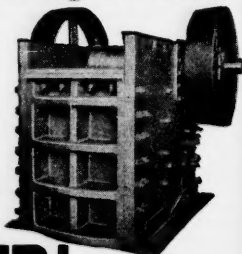


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